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CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

VOL. LVII.

NOS. 212, 213, 214, AND 215.

MAY, JUNE, JULY, AND AUGUST, 1898.

DEPARTMENT OF STATE * UNITED STATES OF AMERICA *

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1898.

~~VI 990~~

9/21 Econ 5810.2

1898, Jan. 7 – Aug. 16

The Publishers.

~~H 990~~

Vol. LVII.

No. 212

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DEPARTMENT OF STATE * UNITED STATES OF AMERICA *

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1898.

PUBLICATIONS OF THE BUREAU OF FOREIGN COMMERCE.*

The publications of the Bureau of Foreign Commerce, Department of State, are:

I.—Commercial Relations, being the annual reports of consular officers on the commerce, industries, navigation, etc., of their districts.

II.—Consular Reports, issued monthly, and containing miscellaneous reports from diplomatic and consular officers.

III.—Advance Sheets, Consular Reports, issued daily, except Sundays and legal holidays, for the convenience of the newspaper press, commercial and manufacturing organizations, etc. [See pages I–VII.]

IV.—Exports Declared for the United States, issued quarterly, and containing the declared values of exports from the various consular districts to the United States for the preceding three months.

V.—Special Consular Reports, containing series of reports from consular officers on particular subjects, made in pursuance to instructions from the Department.

Following are the special publications issued by the Bureau prior to 1890:

Labor in Europe, 1878, one volume; Labor in Foreign Countries, 1884, three volumes; Commerce of the World and the Share of the United States Therein, 1879; Commerce of the World and the Share of the United States Therein, 1880–81; Declared Exports for the United States, First and Second Quarters, 1883; Declared Exports for the United States, Third and Fourth Quarters, 1883. Cholera in Europe in 1884, 1885; Trade Guilds of Europe, 1885; The Licorice Plant, 1885; Forestry in Europe, 1887; Emigration and Immigration, 1885–86 (a portion of this work was published as Consular Reports No. 76, for the month of April, 1887); Rice Pounding in Europe, 1887; Sugar of Milk, 1887; Wool Scouring in Belgium, 1887; Cattle and Dairy Farming in Foreign Countries, 1888 (issued first in one volume, afterwards in two volumes); Technical Education in Europe, 1888; Tariffs of Central America and the British West Indies, 1890.

The editions of all these publications except Tariffs in Central America, etc., are exhausted and the Department is, therefore, unable to supply copies.

In 1890, the Department decided to publish reports on special subjects in separate form, to be entitled Special Consular Reports. There are now the following Special Consular Reports:

Vol. 1 (1890).—Cotton Textiles in Foreign Countries, Files in Spanish America, Carpet Manufacture in Foreign Countries, Malt and Beer in Spanish America, and Fruit Culture in Foreign Countries.

Vol. 2 (1890 and 1891).—Refrigerators and Food Preservation in Foreign Countries, European Emigration, Olive Culture in the Alpes Maritimes, and Beet Sugar Industry and Flax Cultivation in Foreign Countries.

Vol. 3 (1891).—Streets and Highways in Foreign Countries.

Vol. 4 (1891).—Port Regulations in Foreign Countries.

Vol. 5 (1891).—Canals and Irrigation in Foreign Countries.

Vol. 6 (1891 and 1892).—Coal and Coal Consumption in Spanish America, Gas in Foreign Countries, and India Rubber.

Vol. 7 (1892).—The Stave Trade in Foreign Countries and Tariffs of Foreign Countries.

Vol. 8 (1892).—Fire and Building Regulations in Foreign Countries.

Vol. 9 (1892 and 1893).—Australian Sheep and Wool and Vagrancy and Public Charities in Foreign Countries.

Vol. 10 (1894).—Lead and Zinc Mining in Foreign Countries and Extension of Markets for American Flour.

Vol. 11 (1894).—American Lumber in Foreign Markets.

Vol. 12 (1895).—Highways of Commerce.

Vol. 13 (1896 and 1897).—Money and Prices in Foreign Countries.

Of these Special Consular Reports, Australian Sheep and Wool, Cotton Textiles in Foreign Countries, Files in Spanish America, Fire and Building Regulations, Malt and Beer in Spanish America, Port Regulations, Refrigerators and Food Preservation, and Tariffs of Foreign Countries are exhausted, and no copies can be supplied by the Department.

Of the monthly Consular Reports, many numbers are exhausted or so reduced that the Department is unable to accede to requests for copies. Of the publications of the Bureau available for distribution, copies are mailed to applicants without charge. In view of the scarcity of certain numbers, the Bureau will be grateful for the return of any copies of the monthly or special reports which recipients do not care to retain. Upon notification of willingness to return such copies, the Department will forward franking labels to be used in lieu of postage in the United States, Canada, the Hawaiian Islands, and Mexico.

Persons receiving Consular Reports regularly, who change their addresses, should give the old as well as the new address in notifying the Bureau of the fact.

In order to prevent confusion with other Department bureaus, all communications relating to consular reports should be carefully addressed, "Chief, Bureau of Foreign Commerce, Department of State, Washington, U. S. A."

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* Formerly Bureau of Statistics. Name changed to Bureau of Foreign Commerce by order of the Secretary of State, July 1, 1897.

DAILY CONSULAR REPORTS.

Beginning January 1, 1898, the miscellaneous reports of consular and diplomatic officers upon commerce and industries in foreign countries will be printed immediately after their receipt at the Department of State in the form of ADVANCE SHEETS, heretofore issued at intervals as occasion seemed to require. The change to what will practically be the daily publication of these reports, excepting Sundays and legal holidays, has been ordered by the Secretary of State, with the view to the promptest and widest possible distribution of the commercial information obtained by the Department of State for the benefit of the mercantile and manufacturing interests of the United States. The daily edition is intended especially for the use of the newspaper press, which will thus be enabled to obtain the reports in full with the least delay, the boards of trade, chambers of commerce, associations of exporters and manufacturers, and other organized bodies engaged in the development of our foreign commerce, and of individual firms especially interested in obtaining such data without loss of time. The monthly CONSULAR REPORTS, being a reprint of the ADVANCE SHEETS in convenient form for preservation, will be issued as heretofore. Persons applying for CONSULAR REPORTS should state whether the daily or the monthly edition is desired, as duplication will thus be avoided.

The order of the Secretary of State directing the change is as follows:

DEPARTMENT OF STATE,
Washington, December 7, 1897.

The Chief of the Bureau of Foreign Commerce is hereby authorized to print a special edition of consular reports, to be known as ADVANCE SHEETS, CONSULAR REPORTS, to be issued as soon as possible after the receipt of such reports in the Department, for the benefit of trade organizations, business firms, the newspaper press, etc. This edition is to be printed as frequently as practicable in the form of single reports or series of reports to be numbered consecutively.

JOHN SHERMAN,
Secretary of State.

The reasons for the more frequent publication of the CONSULAR REPORTS are explained in a report to the Secretary of State by the

Chief of the Bureau of Foreign Commerce, which is, substantially, as follows:

DEPARTMENT OF STATE,
Washington, December 7, 1897.

Honorable JOHN SHERMAN,
Secretary of State.

SIR: I have the honor to call your attention to the condition and prospects of the work of this Bureau, formerly the Bureau of Statistics, with the view to its further improvement. The chief function of the Bureau is the collection and publication of diplomatic and consular reports relating to the commerce and industries of foreign countries. Since the publication of the monthly periodical, CONSULAR REPORTS, was begun in 1880, the operations of the Bureau have undergone a process of gradual development, until now, the Department of State, notwithstanding inadequate resources for this purpose, has become a great agency for the dissemination, by means of its own publications, the newspaper press, and correspondence with trade organizations and individual firms, of fresh and reliable information from all parts of the world as to commercial movements, industrial activity, development of new fields of enterprise and the practical application of inventions and scientific discoveries to agriculture, mining, and processes of manufacture. Five distinct classes of publications are now issued by the Bureau of Foreign Commerce, viz:

I. COMMERCIAL RELATIONS OF THE UNITED STATES, in two large volumes, being annual reports from consular officers upon trade and commerce, manufacturing and other industries, finance, customs laws, transportation facilities, etc., with special reference to the opportunities for, or obstacles to, the extension of the sales of United States goods abroad. These reports are summarized in an introduction, which is also printed separately in pamphlet form with the title Review of the World's Commerce, for the convenience of those who wish to obtain a comprehensive view of our trade relations with the world at large, rather than to acquaint themselves with facts and figures in detail.

II. CONSULAR REPORTS, issued monthly, and containing, besides the reports of consular officers, either voluntary or in response to instructions from the Department, a great variety of valuable matter from our diplomatic representatives. It is gratifying to be able to state that there has been a noticeable increase in the activity and interest shown by the embassies and legations, as well as by consular officers, in the collection of useful data for this publication, including statistical documents of foreign governments, which are freely availed of. The effort has been made to restrict

the contents of the monthly issue, as nearly as possible, to matter of practical value to our industries and commerce, for the reason that other Departments and Bureaus of the Government are charged with the publication of much of the information which formerly found its way into the pages of what was expressly intended to be a commercial periodical. Duplication of matter in Government publications and consequent waste and confusion are thus avoided. The contents of the monthly reports, nevertheless, still continue to cover a wide range of subjects. They may be said to describe, with more or less fullness, the industrial activity and progress of the world from year to year. But few, if any, inventions or discoveries of practical importance are omitted in the reports from the leading industrial countries, and a number of instances might be cited of new industries established or improvements in manufacturing processes adopted in the United States as the result of suggestions or information supplied in these monthly reports.

III. ADVANCE SHEETS, CONSULAR REPORTS. These are selected reports, of more immediate interest or importance, from the contents of the monthly issue, which are printed in advance for the benefit of the newspaper press, boards of trade, chambers of commerce and other trade or industrial organizations, bureaus of commercial information, and individual merchants and manufacturers throughout the country, especially such as are engaged in foreign trade.

IV. SPECIAL CONSULAR REPORTS, being series of reports on particular subjects, prepared under special instructions from the Department. The titles of some of them—such as Tariffs of Foreign Countries, Port Regulations in Foreign Countries, Canals and Irrigation, and Money and Prices in Foreign Countries—sufficiently indicate their general character.

V. DECLARED EXPORTS. This is a quarterly publication, giving the articles exported to the United States and their invoice values as declared at the various consulates throughout the world.

For some time past, the fact has been fully recognized that the element of timeliness in getting these reports before the public is of great importance. To this end, every effort has been made to secure the utmost promptitude in publication in the order of their relative value, and in spite of the embarrassment caused until quite recently by an insufficient working force and a meager appropriation, a steady and, I trust, substantial improvement has been effected. Complaints of tardy publication, which, under old conditions, was in many cases unavoidable, are no longer received, and within the past two years, commendation of the celerity with which the reports are printed has come from so many quarters that the Department may be considered as responding satisfactorily to the demands upon it for this class of

information, though the capabilities of its service to commerce and manufactures are still but imperfectly developed.

The actual degree of progress attained is best exemplified by the fact that, as long ago as June, 1895, it had excited the attention of the British chambers of commerce, and, during the past year, it has elicited many complimentary expressions from leading financial, commercial, and industrial journals of Great Britain. In all of these comments, the practical value of the reports of United States consular officers and the promptness with which they are printed and distributed are the points especially dwelt upon. In a circular letter to the chambers of commerce of the United Kingdom, June 19, 1895, the executive council of the associated chambers stated that its attention had been directed "to the action taken by the Government of the United States and by other governments by means of special consular reports, in order to supply their traders with information up to date with regard to openings for business in foreign countries," and the opinion was expressed that the practical value of the reports of British consuls "would be much increased if they afforded more direct and early suggestions and details with respect to trade questions of present interest." The local chambers of commerce were, therefore, invited to make suggestions as to trade inquiries by consuls for submission to the Foreign Office. In the responses to this circular, a variety of changes were proposed for the improvement of the commercial work of the British consular service. At the meeting of the Bradford Chamber of Commerce, the statement was made that United States consuls "did a great deal more" for the extension of trade than British consuls did. The Cardiff chamber complained of the delay in printing the British consular reports. The Hull chamber thought the reports of British consuls should be given to the public as promptly as possible, "if necessary, even by telegraph." The Newport chamber replied to the effect that trained business men should be selected as consuls, and that it was desirable that the system of the United States Government in instructing its consular representatives "to report exhaustively upon trade and commerce, either in their isolated or general phases or developments," should be adopted. These responses were submitted to the British Foreign Office, which, on the 7th of August, 1896, answered the various criticisms and recommendations in an elaborate statement, in which it was asserted that the consular reports were issued "with all possible expedition after their receipt," and that the telegraph was invariably used for the transmission of information of immediate importance. Delays were explained by the statement that reports, after having been put into type, were, whenever possible, returned to the consuls with printers' proofs for correction—a practice, it may be remarked, which is

not followed in publishing the United States consular reports, because of the loss of time necessarily involved. Another reason for the belated character of many of the British reports is to be found in the fact that the consuls do not make their reports, as a rule, oftener than once a year, and even then, they wait until "the necessary statistical data are available in foreign countries." United States consuls, on the other hand, report promptly upon any subject they may think timely and valuable to commerce and industries at home. Even in the preparation of their annual reports, they are required to furnish all the information they can collect from reliable sources by a given date without reference to official statistics, if the latter are not then at hand. This difference in methods would alone serve to explain the elements of superiority in the United States system which seem to commend it so strongly to British trade bodies.

[Here follow extracts from leading trade journals of Great Britain, such as the Iron and Coal Trades Review, March, 1897; the London Financial News, April 17, 1897; the British Trade Review, July 1, 1897; the British Trade Journal, June 1, August 1, and October 1, 1897; the Textile Manufacturer, of Bradford, September 15, 1896; the Consular Journal, of London, September 16, 1897, etc., urging greater promptitude in collecting and publishing British consular reports and the adoption of the salient features of the United States system.]

If we take into consideration the fact that it is only within a recent period that our manufacturers have turned their attention seriously to the export trade and that the consular officers have received the stimulus of such activity, supplemented by special instructions from the Department of State, the results which I have endeavored to indicate would seem to be remarkable. They are such as, in my judgment, foreshadow a great future of usefulness for our diplomatic and consular representatives in extending the sales of every class of American goods, as well as of raw products, abroad. The average American is almost sure to have the business instinct well developed, and added to this is a spirit of enterprise and an energy and dash which give him a great advantage in competition with the slower and more cautious traits of the average European. These are the qualities which, in my judgment, have given the consular service of the United States the superiority so freely admitted by the best opinion in Great Britain. What has actually been accomplished, gratifying though it be, seems to me but an indication of what may easily be done. Thus far, this Bureau has had to work under great disadvantages, and I respectfully call attention to the importance of liberal provision for future development in the interests of American commerce, to which our industries must look for the distribution of their

surplus product. The Bureau, even with its present facilities, has reached the point of reducing, as far as possible, the obstacles and delays to prompt distribution of the information which comes, in steadily increasing volume, from all quarters of the globe. This information is given immediately to the newspaper press, which, through the different news agencies and special correspondents, disseminates the information by telegraph and mail all over the country. The reports are printed as promptly as possible in the monthly publication, CONSULAR REPORTS. A great mass of information is sent out from the Bureau of Foreign Commerce by correspondence in answer to inquiries from individuals and business firms. This latter branch of the work has developed so greatly that the Bureau feels the need of a competent staff to classify data and respond to such inquiries with the least delay. A Division of Information is one of the pressing necessities of the work.

For the present, however, I confine myself to a recommendation which will enable the Bureau to still further minimize the delay in printing and circulating the reports. By a simple and inexpensive change in the methods of publication, it will be possible to print the reports day by day as they come into the Department, and issue them promptly for the benefit of the newspaper press and trade bodies, as well as individual manufacturers and merchants, who are constantly writing to the Department for advance copies of particular reports. It has been the practice of the Bureau, for some time, to issue those of the reports which are of more immediate value in the form of ADVANCE SHEETS, for the special benefit of the classes indicated above. It is difficult, however, to determine in advance the extent of the demand for any particular report, and in order that all requests may be complied with without inconvenience or delay, I have the honor to request your approval of the accompanying order, which authorizes this Bureau to print all reports, as they are received, in a special edition to be known as ADVANCE SHEETS, CONSULAR REPORTS. These ADVANCE SHEETS can be numbered consecutively, with titles by subjects, and by means of a card catalogue, it will be possible to respond to a demand for a particular report at any time. The reports, at the end of each month, can easily be collected and classified for printing in the monthly form, as at present. This latter publication would still be useful for reference purposes and for all those who do not attach importance to the early receipt of the data it contains.

The proposed change involves an increased cost of only about twelve hundred dollars per annum, owing to the fact that the additional expense will be merely that of paper and presswork, and, perhaps, additional help in the mailing department. The change, on

the other hand, will insure economy and promptness in answering requests for information and in supplying the newspaper press (a most important agency for the distribution of this information) with the full reports of the consuls at the earliest possible moment, and will encourage consular officers, by the speedy publication of their reports, to put forth their best efforts in this direction. As to the latter result, I may remark that the increase of interest among consular officers in the commercial work of the Department is very perceptible of late, and that the annual reports to be printed in COMMERCIAL RELATIONS, which I hope to have ready by the 1st of January, 1898, promise to be superior to any that have yet been obtained. If the proposed system be adopted, I am satisfied that the Department will have exhausted the possibilities of prompt publication and efficient distribution of commercial reports, and that we need fear no possible rivalry on this point from any of our competitors for foreign trade. If the present work of the consular service in transmitting commercial information by mail could be supplemented by the use of the cable when necessary, in order to advise American manufacturers and merchants of important events in industry and commerce, nothing, it seems to me, would be left to be desired in this branch of the work. It will, of course, be for Congress to determine whether provision shall be made for such extension of the present system, and also for additional facilities which are sorely needed for the development of other features of the work.

Respectfully yours, FREDERIC EMORY,
Chief, Bureau of Foreign Commerce.

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Full directions for binding the Consular Reports are given in No 131, page 663.

MAY 9 1898

VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to April 1, 1898, have been prepared to assist in computing the values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz, (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic[*].	Gold and silver..	Peso..................	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary[†].....	Gold	Crown..............	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc...............	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil......................	Gold	Milreis..............	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North Amerca (except Newfoundland).	........do	Dollar..............	1.00	
Chile........................	........do	Peso..................	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica................	........do	Colon................	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	........do	.92,6	Gold—doubloon ($5.01,7); silver—peso.
Denmark	Gold	Crown..............	.26,8	Gold—10 and 20 crowns.
Egypt.......................	........do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland....................	........do	Mark.................	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc...............	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark.................	.23,8	Gold—5, 10, and 20 marks.
Great Britain...........	........do	Pound sterling...	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....................	Gold and silver..	Drachma..........	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	........do	Gourde.............	.96,5	Silver—gourde.
Italy.........................	........do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Japan[‡]	Gold	Yen...................	.49,8	Gold—1, 2, 5, 10, and 20 yen.
Liberia	........do	Dollar..............	1.00	
Netherlands[§]............	Gold and silver..	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar..............	1.01,4	Gold—$2 ($2.02,7).
Portugal..................	........do	Milreis..............	1.08	Gold—1, 2, 5, and 10 milreis.
Russia[‖].....................	........do	Ruble...............	.77,2	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain.......................	Gold and silver..	Peseta..............	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown..............	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc...............	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster..............	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela................	Gold and silver..	Bolivar.............	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

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[*] In 1874 and 1875, the gold standard prevailed in the Argentine Republic.

[†] On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ended July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

[‡] For particulars as to the change from silver to the gold standard, see CONSULAR REPORTS No. 201, p. 259.

[§] The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

[‖] Russia: Gold the nominal standard; silver the actual standard.—*Note by the United States Treasury.* See, also, review of Russian industries and commerce by the Russian Minister of Finance in "Review of the world's commerce," Commercial Relations of the United States for 1895–96, p. 230.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6		
China	Silver	Haikwan tael	1.61	1.61				
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).			4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7		
	Silver						.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2		
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.6[illegible]	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	[illegible]	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso				.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen			.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

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*The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

†The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1895.				1896.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.45,5	$0.44,1	$0.48,6	$0.48,6	$0.49,1	$0.49,3	$0.49,7	$0.49
Central America.	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
China	Amoy tael	....	....	....	....	....	....	....	.79,3
	Canton tael	....	....	....	....	....	....	....	.79
	Chefoo tael	.70,4	.68,3	.75,1	.75,2	.75,9	.76,3	.76,9	.75,8
	Chinkiang tael	....	....	....	....	....	....	....	.77,4
	Fuchau tael	....	....	....	....	....	....	....	.73,3
	Haikwan tael	.74,9	.75,6	.80	.80	.80,8	.81,2	.81,9	.80,6
	Hankow tael	....	....	....	....	....	....	....	.74,2
	Ningpo tael	....	....	....	....	....	....	....	.76,2
	Niuchwang tael.	....	....	....	....	....	....	....	.74,3
	Shanghai tael	.67,3	.65,2	.71,8	.71,8	.72,5	.72,9	.73,5	.72,4
	Swatow tael	....	....	....	....	....	....	....	.73,2
	Takao tael	....	....	....	....	....	....	....	.79,8
	Tientsin tael	.71,4	.69,2	.76,1	.76,2	.76,9	.77,3	.78	.76,8
Colombia	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Ecuador	do	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
India	Silver rupee	.21,6	.21	.23,1	.23,1	.23,3	.23,4	.23,6	.23,3
Japan	Silver yen	.49,1	.47,6	.52,4	.52,4	.52,9	.53,2	.53,2	.52,8
Mexico	Silver dollar	.49,5	.47,9	.52,8	.52,8	.53,3	.53,6	.54	.53,2
Persia	Silver kran	....	....	.08,9	.09	.09	.09,1	.09,2	.09
Peru	Silver sol	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Russia	Silver ruble	.36,4	.35,3	.38,9	.38,9	.39,3	.39,5	.39,8	.39,2
Tripoli	Silver mahbub	.41,1	.39,8	.43,8	.43,8	.44,3	.44,5	.44,9	.44,2

Countries.	Monetary unit.	1897.				1898.	
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.
Bolivia	Silver boliviano.	$0.47,4	$0.46,8	$0.44,3	$0.41,2	$0.42,4	$0.40,9
Central America	Silver peso	.47,4	.46,5	.44,3	.41,2	.41,4	.40,9
China	Amoy tael	.76,7	.75,7	.71,7	.66,4	.68,5	.66,2
	Canton tael	.76,5	.75,5	.71,5	.66,4	.68,3	.66
	Chefoo tael	.73,3	.72,4	.68,6	.63,7	.65,5	.63,3
	Chinkiang tael	.74,9	.73,9	.70	.65,1	.66,9	.64,6
	Fuchau tael	.70,9	.70	.66,3	.61,6	.63,4	.61,2
	Haikwan tael	.78	.77	.73,1	.67,8	.69,7	.67,3
	Hankow tael	.71,7	.70,8	.67,1	.62,3	.64,1	.61,9
	Ningpo tael	.73,7	.72,8	.68,9	.64	.64,3	.63,6
	Niuchwang tael.	.71,9	.71	.67,2	.62,5	.65,9	.62
	Shanghai tael	.70	.69,1	.65,5	.60,8	.62,6	.60,4
	Swatow tael	.70,8	.69,9	.66,2	.61,5	.63,3	.61,1
	Takao tael	.77,2	.76,2	.72,2	.67	.66	.66,6
	Tientsin tael	.74,3	.73,4	.69,5	.64,6	.66,4	.64,1
Colombia	Silver peso	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9
Ecuador	do	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9
India *	Silver rupee	.22,5	.22,2	.21,1	.19,6	.20,1	.19,1
Japan	Silver yen	.51,1	.50,5	....	....	....	....
Mexico	Silver dollar	.51,5	.50,8	.48,2	.44,6	.46	.44,4
Persia	Silver kran	.08,7	.08,6	.08,2	.07,6	.07,8	.40,9
Peru	Silver sol	.47,4	.46,8	.44,3	.41,2	.42,4	....
Russia	Silver ruble	.37,9	.37,4	....	....	....	....
Tripoli	Silver mahbub	....	....	....	....	....	....

*The value of the rupee to be determined by consular certificate.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	20 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Dun	Japan	1 inch.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	4 yards.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Kota	Japan	5.13 bushels.
Korree	Russia	3.5 bushels.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	11⅗ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1¾ acres.
Do	Nicaragua and Salvador	1.727 acres.
Marc	Bolivia	0.507 pound.
Maund	India	82 2/7 pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Milla	Nicaragua and Honduras	1.1493 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	3.6 feet.
Seer	India	1 pound 13 ounces.
Shaku	Japan	10 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.
Vara	Argentine Republic	34.1208 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Castile	0.914117 yard.
Do	Central America	32.87 inches.
Do	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

Vol. LVII. MAY, 1898. No. 212.

CARRIAGE AND WAGON WHEELS IN EUROPE.

The following reports are replies to an instruction sent by the Department of State, on August 17, 1897, to the consuls-general in Europe, at the request of a wheel manufacturer in Pennsylvania:

AUSTRIA-HUNGARY.

I have the honor to report, in compliance with the Department's inquiry as to the quantity and value of carriage and wagon wheels and the material therefor imported into Austria-Hungary in 1896, that there have been, in the last two or three years, inconsiderable shipments from the United States of hickory carriage wheels. This importation was due to a fashion which sprang up, to all appearances, spontaneously, and which has now practically gone out of vogue. At present, the wheels for trotting sulkies are the only species which can boast of a regular import from the United States, and they come by way of Germany; it is, therefore, impossible to ascertain the correct figures as to the extent of the trade.

The following kinds of woods are used in Austria-Hungary for the manufacture of wheels: Ash for spokes and fellies, elm and ash for hubs, and beach for fellies of ordinary vehicles.

Carriage wheels can not be suggested as an article for import into Austria-Hungary, because this Monarchy has an extensive supply of the woods needed for their manufacture.

Machinery used in the production of carriage and wagon wheels, if not made in Austria, is imported from Germany, and is much cheaper than ours; but, above all, the low wages make the home product cheaper at the present time than any foreign manufacture.

The wagons and vans in this country are of such different types, and their various shapes are so dear to their respective owners—either being the product of their own inventive genius or having their origin in many local and provincial customs—that they can only be built "on the spot" and at varying prices.

CARL BAILEY HURST,
Consul-General.

VIENNA, *December 4, 1897.*

BELGIUM.*

The customs authorities do not keep a separate record of carriage and wagon wheels imported into or exported from Belgium. If wheels are finished, they are classed with carriages, duty 12 per cent ad valorem; but if in the rough, they are classed with wood, other than oak and walnut, and pay a duty of 10 per cent ad valorem.

The only material imported into this country from the United States for the manufacture of carriage and wagon wheels is hickory.

The latest commercial statistics show the following importations of carriages and wagons into, and exportations from, Belgium during the year 1896:

Country.	Imports.		Exports.	
	Francs.		*Francs.*	
England	207,989	$40,042.88	122,808	$23,701.94
France	615,658	118,821.99	184,934	35,692.26
Germany	128,970	24,891.21	171,235	33,048.35
Brazil	....	....	10,287	1,984.49
Chile	....	....	44,580	8,603.94
Spain	....	....	20,014	3,862.70
Hamburg	....	....	12,730	2,456.89
Mexico	....	....	20,200	3,898,60
Holland	73,623	14,209.23	222,588	42,959.48
Argentine Republic	....	....	95,675	18,465.27
Russia	....	....	59,650	11,512.45
Switzerland	....	....	21,743	4,196.40
United States	13,665	2,637.34	....	....
Other countries	12,610	2,433.73	63,915	12,335.59

GEO. W. ROOSEVELT,
Consul.

BRUSSELS, *September 14, 1897.*

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*In Commercial Relations for 1895 and 1896, vol. 2, p. 22, in the table showing the exports of Belgium for 1894, carriages are given as being exported to the value of $13,210,078. Consul Roosevelt (his attention having been called thereto), under date of September 14, 1897, explains this entry as follows:

"Under the Belgium tariff classification Nos. 29 and 60, machinery (carriages) embraces all kinds of carriages for railway and tramway use. Under classification 60, all kinds of carriages, other than railway and tramway carriages, are embraced. The misleading error in Commercial Relations occurred by placing 'carriages' immediately under 'machinery,' instead of placing the word in parentheses, as follows: 'Machinery (carriages).'"

DENMARK.

The Danish statistics, with few exceptions, include the imports of all articles made of wood under the general term "manufactures of wood." Figures, therefore, dealing with the imports of wheels and material therefor can only be approximated by men familiar with the trade.

No ready-made wheels are imported into Denmark. For work wagons, trucks, drays, and heavy vehicles, the material used for wheels is oak, supplied principally by Denmark itself, the balance coming from Sweden. Such wheels must, according to law, measure at least 4 inches across the tire; this rule applies both to country and city.

For carriages, buggies, road carts, and light vehicles, the wheels are made of American hickory, obtained exclusively from importing houses in Hamburg. It is safe to say that the wheels of all the cabs in this city are made of hickory.

I have consulted Mr. Larsen, of the firm of N. Larsen & Co., No. 11 Smallegade, the largest manufacturers of wagons and carriages in the Kingdom. He estimates that there is imported annually 20,000 hickory spokes and 500 rims (fellies). The manufacture is only for domestic consumption, and Mr. Larsen thinks the supply about equals the demand. This firm itself consumes about one-half of the annual import of hickory. He is also of opinion that during the present year (1897) there have been imported about 3,500 rough hubs. The orders for this market being so small, dealers find it more convenient to buy from Hamburg, especially as the American exporter is averse to making such small shipments. The population of the Kingdom is about 2,200,000, and, although the quantity of material imported may seem insignificant from an American standpoint, if it meets the demand, as Mr. Larsen says—and he is a competent judge—it is difficult to see how it can be increased, unless an export trade in wheelwright supplies is developed, and there does not appear to be any prospect of this.

I have also been in consultation with Messrs. Sally Meyer & Co., No. 11 Laderstrade, dealers in carriage and wagon supplies, and quote their letter to me in full as follows, in translation:

> In reply to your letter, we must remark that ready-made wheels are not imported into Denmark. Although the duty on ready-made wheels is 6¼ öre (1.7 cents) per Danish pound (1.102 American), we do not doubt that the Danish carriage builders would find it to their advantage to import them from America; but our manufacturers are, in this respect, very conservative, and, for a middleman, it would be very difficult and risky to carry a stock which must necessarily consist of many sizes. If a capable firm would send a sample or consignment lot here, it

would undoubtedly lead to business. When the wheels have been introduced and found to be good, they could be imported for our own account. This applies, however, only to wheels for light vehicles. Wheels for working trucks can not, in our opinion, be imported. The duty on such heavy articles amounts to too much, and our forests furnish so much ash and oak, of which the wheels are made, that foreign competition is excluded.

On the other hand, we import via Hamburg a good deal of American hickory rims and spokes. We have many times tried this import from the United States direct, but always with unsatisfactory results. We have always ordered the very best goods, and they have always sent us goods very much inferior to those (American goods) we buy from Hamburg merchants. The reason probably is that Hamburg imports more in a week than the whole of Denmark would import in a year; but the principal reason why we can buy the rims cheaper through Hamburg may be found in the fact that Hamburg imports the wood in its natural form and works it into rims, while we must import the rims already shaped, in which condition they take up more space, and freight is higher. These rims are used exclusively for light-draft vehicles, and we believe the yearly import amounts to about 300 four-wheel sets. The duty on these is only 31 öre (8.3 cents) per 100 pounds Danish.

It would seem from the foregoing that there is no market here at the present time for heavy wheels from the United States; that we already control the market, through Hamburg, in wheel material for light-draft vehicles, and that there is an opening for the ready-made wheels for the latter. These could be stored in the "free port" duty free and exhibited in the city through samples, or a trial shipment could be consigned direct to a dealer in Copenhagen, at the risk and account of the American exporter. The Danish merchant wants the privilege of seeing and handling the goods before investing his money, and, in my opinion, this is the only way in which American-made wheels can be introduced. The three principal dealers in Copenhagen are: H. E. Bonner, Vestergade 28; Sally Meyer & Co., Laderstrade 11; Nienstadt & Co., Vester Boulevard 20.

ROBERT J. KIRK,
Consul.

COPENHAGEN, *September 18, 1897.*

FRANCE.

With reference to Department instruction of August 17, 1897, concerning the quantity and value of carriage and wagon wheels and the material therefor imported into France during the year 1896, and particularly regarding kinds and quantities imported, those most suitable for the market, and the best means of increasing American trade therein, I have the honor to inform you that I have made thorough inquiry with regard to the subject and regret to state that the import from the United States is practically "nil."

I have consulted several prominent manufacturers, and, besides the fact that they prefer to manufacture their own spokes, hubs, and wheels, they state that the duty of 60 francs ($11.58) per 100 kilograms (220.46 pounds) almost prohibits the use of foreign-manufactured material.

I am also informed that mahogany is now very generally substituted for hickory in the manufacture of wheels in France, it being found cheaper and quite as durable.

The delay in transmitting this report is due to a variety of causes, notably the difficulty of securing information from manufacturers, when they have reason to believe that it is desired for the purpose of competition, and the constantly increasing volume of work at this consulate-general.

JOHN K. GOWDY,
Consul-General.

PARIS, *February 4, 1898.*

GERMANY.

The demand of Germany on the United States for the material of which wagon wheels are made is yet comparatively small, in proportion to the material used by the home wagon makers, and is confined mostly to hickory spokes, moderate quantities of rock-elm hubs, and some wood for fellies, as well as some bent fellies. All these articles come into the country at the nominal import tariff of 30 pfennigs (7½ cents) for 100 kilograms (220.46 pounds), which rate pays but little, if any, more than the handling through the custom-house, it being one of the policies of the Government to admit any raw or crudely manufactured material used in German manufactures either free or at as low a tariff as can possibly be afforded. It is quite impossible to ascertain, even approximately, the amount of imports of these articles either in general or from the United States separately, because in the records they are classed with other wooden ware coming from turning shops, and with the crude, which pay the same tariff rate. It is safe to say, however, that the imports are mostly from the United States. Of home woods and those brought from neighboring countries, German oak, elm, ash, and locust are mostly used, oak having the preference for heavy trucks and wagons.

In the manufacture of wagons or other vehicles for export, Germany takes no prominent place, supplying some of the neighboring countries only to a moderate extent. Having the most excellent forestry laws, the supply of home woods of the more valuable class is kept up to the extent possible in a country so thickly populated; so it seems likely that the imports of wagon material will not vary much from year to year, and that the demand for hickory spokes will be entirely filled from the United States. There have been dealings by the larger traders and manufacturers with that country for years.

In ready-made wheels, on which, unpainted, the import tariff is 3 marks (72 cents) per 100 kilograms, the trade thus far is exceedingly light. Here a peculiar spirit opposes innovations. It may be called the spirit of guild (Zunftwesen), not known exactly in that way in the United States, yet resembling the different mechanics' labor unions. These guilds have an excessively conservative influence in the management of all affairs pertaining to industries, and are jealously watching to keep the balance of power in their favor.

Thus, the blacksmith union opposes as much as possible, by all legitimate means, the introduction of such wheels as the "Warner" and the "Star," and so far the wood-hub wheel appears to be the one legitimately trusted in Germany.

Some few bolder dealers and manufacturers, who are willing to take the chance of a possible silent boycotting by the wagon makers, are beginning to experiment with importing these wheels, some of which have become known here by whole carriages having been imported. The naïve objection to them by the blacksmiths is that "they hardly ever need repairs."

Should these wheels assert their superiority in the long run, as they already have in England, the demand for them will come. So far, however, the wood-hub wheel is the wheel in Germany.

As to selling or disposing of wheels or wheel material here, it should be remembered that Berlin is becoming every year more and more the manufacturing, mercantile, and distributing center of Germany, and that, if any American exporter wants to do a safe and paying business in Germany, a simple agency in Hamburg will not do it. A good, bright man, thoroughly familiar with the article which is to be sold and the handling of it, understanding the German language—unless he can bear the expense of a good interpreter—should come to Berlin and sell the goods himself; or, what is still better, establish a branch house here.

Whether the trade in wagon wheels and the material used for them can be made large enough to pay for such a branch house, I can not with safety assert; but I believe that such a house would not only get the trade for the manufacturer establishing it, but would also, by the facility of seeing exactly what is wanted here, create new business for his American factory.

Berlin manufacturers and dealers, I understand, are supplied with American wagon-makers' material by factories located in New Jersey, Indiana, Pennsylvania, and by one large concern in Buffalo, which shows that they are quite familiar with American goods in this line.

JULIUS GOLDSCHMIDT,
Consul-General.

BERLIN, *October 23, 1897.*

NETHERLANDS.

In reply to Department instruction, I have to state that the only importers of American material for carriage and wagon wheels in Amsterdam are Messrs. Gebroeders Spyker, the largest carriage manufacturers in the city, and these import only a small quantity of hickory spokes and hubs, which they use in making wheels for light carriages. As oak wood is very cheap in Holland, it is generally used for carriage and wagon wheels, and there will not be much chance to increase the imports of the American material.

ALB. VINKE,
Acting Consul.

AMSTERDAM, *October 4, 1897.*

ITALY.

Owing to the fact that the Italian customs does not keep a separate entry for wagon and carriage wheels, they being classed with "wagons and vehicles with two or more wheels," it is impossible to gather any information from that quarter.

The imports into Italy in 1896 were: Wagons, $7,500; bicycles, $166,000, of which $39,000 worth was from the United States; cabs and carriages, $49,000, of which $5,000 worth was from the United States.

Personal inquiries from carriage manufacturers have generally remained unanswered; but one manufacturer here in Rome, who is considered to be the best in Italy for high-grade vehicles, informs me that he imports all the wood, timber, and varnishes he requires for his trade from the United States; the springs, upholstering, and trimmings from France; and the iron and other material necessary for other parts of carriages from Sweden.

The ordinary carriage trade is very extensive in Italy, but nearly all the material used is of domestic production and manufacture.

HECTOR DE CASTRO,
Consul-General.

ROME, *October 7, 1897.*

PORTUGAL.

Such is the enormous duty on wheels that no import of these articles has been made here for years. I am informed that the customs duty on a set of four wheels would amount to nearly 200 milreis ($216); on a four-wheel carriage, charges included, 300 milreis ($324); and on a two-wheel carriage, 200 milreis.*

J. B. WILBOR,
Vice-Consul.

LISBON, *September 9, 1897.*

RUSSIA.

In reply to Department instructions, I submit the following tabular statement showing the imports into Russia in 1895 and 1896 of carriages, carts, and detached pieces thereof, together with the duties to which they are subjected under the Russian tariff:

Description.	1896.		1895.		From January 1 to May 1, 1897.		Rate of duty.
	Pieces.	Value.	Pieces.	Value.	Pieces.	Value.	
Carriages:	*No.*		*No.*		*No.*		
Large, such as coaches, calashes for four persons, landaus, diligences, and omnibuses.	55	$25,186	44	$16,962	10	$4,112	$101.90 each.
Light, such as calashes for two persons, phaëtons, droskies, cabriolets, cabs, etc.	130	30,326	108	21,588	186	6,168	$69.48 each.
Vans and carts	22	2,570	34	3,598	42	8,738	$30.88 each.
Carts, common, for farmers, and other similar carts for conveyance of freight or passengers.	93	2,056	....	....	10	514	$9.26 each.
Total	300	60,138	186	42,148	248	19,532	
	Tons.		*Tons.*		*Tons.*		
Detached parts of carriages, such as bodies, wheels, lamps, etc., with the exception of springs, axles, and other accessories.	54	69,904	72½	79,156	52	38,036	$6.17 per pood.*

NOTE.—Carriages upholstered, completely finished, pay 20 per cent in addition to the duties stated.
* 1 pood=36.112 pounds.

Carriages of all sorts, heavy and light, are imported chiefly from Germany and Austria-Hungary; while vans and carts, as given in the table, are imported from Austria, Germany, Great Britain, and Holland. Detached parts of carriages (wheels, bodies, lamps, etc.) come from Germany and England.

Hickory wood, which is used in this country for wheels, comes from the United States indirectly, through firms in Germany and England.

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* According to the Portuguese tariff, as printed by the International Tariffs Commission, Belgium, the duty imposed on all vehicles imported into Portugal, except railway carriages, is 27 per cent ad valorem general duties and 25 per cent conventional. Wheels falling under the designation of "wood, manufactured, not otherwise specified," are charged duties the same as carriages.

The principal firms using carriage and wagon material in St. Petersburg, are: M. F. Beyer, Nevski, No. 8; I. Brautigam, Zakharievskaia, No. 8; Th. Wainoff, Liteinaia, No. 15; E. Wienel, Peski, Fourth street, No. 42; Th. Hartley, Zastavskaia, No. 5; T. Meise, Basseinaia, No. 14; I. Chaubert, Serguievskaia, No. 43; P. Jakovlev, Nevski, No. 96.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *September 16, 1897.*

SPAIN.

Owing to the fact that no satisfactory returns of the imports into Spain are published, it is very difficult to give statistics that would prove of any real value to exporters to this country. According to the official Madrid Gazette, there were imported during 1896:

Description.	Quantity.	Value.
	Tons.	
Tires for carriage and wagon wheels	550	$21,483
Wheels, without tires	37	2,344
Axletrees	45	1,764
Wrought-iron hoops and wheels, weighing 220½ pounds and over	3,467	14,506
Wrought-iron wheels, weighing under 220½ pounds	211	2,718
Total	4,310	42,815

In order to obtain more definite information, I called on the leading carriage and wagon builders in Spain—the Sociedad Material para ferrocarriles y construcciones—who furnished me with the following particulars:

> During 1896, we built only 23 carriages; this year we have orders for 700 carriages and wagons, so that one year's statistics are no guide to what our imports from abroad are. Wheels are imported from Germany and Belgium; but, with the exception of the springs, buffers, and couplings and grease boxes, all the accessories required in carriage building are now made in Spain. In 1896 we imported—

From Germany, 40 sets of wheels	$1,400.00
From Belgium:	
28 sets of wheels	1,340.80
168 bearing springs	345.80
160 bearing-spring brackets	208.00
80 guard plates	108.00
72 guide fastners	25.10
40 buffers and couplings	416.00
140 spiral springs	50.00
80 safety chains	68.00
112 grease boxes	521.40
From France, 1 vacuum brake	100.00

This year, of course, our imports of wheels will be much larger; but, owing to the high rate of exchange on foreign countries, we are obtaining almost all our other supplies at home.

The railroad companies in Spain also import large quantities of wheels for their own shops, chiefly from Germany, on account of their cheaper cost as compared with those made in Great Britain.

This meager information is all I have been able to collect on the subject.

H. HENDERSON RIDER,
Vice and Deputy Consul-General.

BARCELONA, *September 22, 1897.*

SWEDEN.

The value of carriage and wagon material imported into this Kingdom for the last fiscal year amounted to $19,173, of which about one-half comes from Denmark and the balance equally from Germany and England.

The wheel most needed must have heavy spokes with strong hubs. The roads are good, but the country is hilly, and consequently the carriage wheel must have all the elements of strength and yet not be clumsy. In the cities, cobble stones constitute the majority of the pavements, and heavy tires are used to keep the wood secure. The iron hub used extensively in the United States I have not seen here.

The conveyances used in the hilly districts are small, and the diameter of wheels correspond. The United States does not seem to be represented in this trade, and samples of the work of American manufactures would have to be placed with merchants here in order to test the prospect of making sales.

EDWARD D. WINSLOW,
Consul.

STOCKHOLM, *October 5, 1897.*

SWITZERLAND.

It is impossible to state the quantity and value of wagon wheels imported into Switzerland, for the reason, first, that no statistics covering importations of wheels are available, and, second, that comparatively few finished wheels are imported at all. As regards the United States, hubs and spokes in the rough, the former of oak and the latter of hickory, are being imported in a small way and finished here. The houses of Geisberger & Co., Zurich, and Kaufmann, at

Basel, large concerns, buy American wood in the rough and manufacture all the parts themselves. These houses are equipped with American tools and wood-working machines. For fine work, as, for instance, wheels for buggies and carriages, American wood is mostly used; but for ordinary vehicles, hubs made from domestic walnut, oak, or acacia are used. I am informed that, in general, the styles, diameter, and sizes of wheels are the same as in the United States, except that in Switzerland all the parts are heavier. The smaller wheel-making concerns use both domestic and American woods, some getting the article finished in the rough and others cutting the timber themselves and manufacturing by hand. In the case of wheels manufactured in Basel, the following items may be found of use:

Size of wheels.—From 75 to 125 centimeters (29½ to 49⅛ inches) in diameter.

Size of hubs.—Length, 20 to 24 and 25 centimeters (7¾ to 9½ and 9¾ inches); diameter, 150, 165, and 185 millimeters (5 9/10, 6½, and 7¼ inches).

Size of spokes.—Thickness, 38 millimeters (1½ inches) at the hub and 32 millimeters (1¼ inches) at the rim; length, 35 to 80 centimeters (13¾ to 31½ inches).

Size of fellies.—Square, 42 to 52 millimeters and 40 to 55 millimeters (1 3/16 to 2 1/16 inches and 1 1/16 to 2 3/16 inches).

Material.—The principal Basel manufacturer imports from the United States, through an agent in Hamburg and another in Havre, elm hubs, mostly in a finished state, and others only perforated. He also imports spokes of acacia and fellies of hickory, both in an unfinished condition.

It does not appear that any finished carriage wheels are imported.

IRVING B. RICHMAN,
Consul-General.

ST. GALL, *September 21, 1897.*

NEW BRAZILIAN TARIFF.

Minister Conger sends from Petropolis, February 1, 1898, a translation of a portion of the new Brazilian tariff, showing the changes made from the tariff of 1896 in the principal products exported from the United States to Brazil. He also sends a table comparing the average equivalent ad valorem duties of 1896 with those of 1897. The minister says:

It will be noticed that some radical changes have been made in both classification and rates of duty, and yet the average rate has only been increased from 41 per cent to 42 per cent. As an entirely new departure, agricultural and mining machinery have been transferred from the free to the dutiable list.

Changes in rates of duty made by the Brazilian tariff act of 1897 on the principal articles imported from the United States.

Books, maps, and other printed matter.—Books, bound in ivory, mother-of-pearl, tortoise, increased from 8.300 milreis* ($1.16) to 12 milreis ($1.68) per kilogram;† same, bound in silk, velvet, or wood, increased from 4 milreis (56 cents) to 5 milreis (70 cents) a kilogram; same in gold or silver increased from 20 per cent to 50 per cent ad valorem. Music reduced from 700 reis (9.8 cents) to 300 reis (4.2 cents) a kilogram.

Wheat, corn, etc.—Flour, of corn, rice, potatoes, tapioca, etc., increased from 300 reis (4.2 cents) to 500 reis (7 cents) per kilogram, while wheat flour remains at 30 reis (0.4 cent) a kilogram; beans reduced from 60 reis (0.8 cent) to 40 reis (0.5 cent) a kilogram; corn, unground, reduced from 30 reis (0.4 cent) to 20 reis (0.2 cent) a kilogram; rice reduced from 60 reis (0.8 cent) to 40 reis (0.5 cent) a kilogram; barley, in grain, from 60 reis (0.8 cent) to 40 reis (0.5 cent) a kilogram; while that in malt is subjected to a tax of 80 reis (1.1 cents) a kilogram; bran reduced from 80 reis (1.1 cents) to 20 reis (0.2 cent) a kilogram.

Carriages, coaches, etc.—Subjected in the 1896 tariff to an ad valorem tax of 84 per cent, are rearranged in the 1897 tariff as follows:

Carriages, coupés, coaches, diligencies, etc.: four wheels, 3 milreis (42 cents) a kilogram, or 60 per cent; two wheels, 4.500 milreis (63 cents) a kilogram, or 60 per cent.

Same unfinished: four wheels, 800 reis (11.2 cents); two wheels, 500 reis (7 cents).

Railway coaches or wagons increased from 20 per cent ad valorem to 30 per cent; axles reduced from 800 reis (11.2 cents) a kilogram to 400 reis (5.6 cents); braces, hubs, tires, and other appurtenances of iron or wood reduced from 1.400 milreis (19.6 cents) to 400 reis (5.6 cents) a kilogram; springs reduced from 1.400 milreis (19.6 cents) to 400 reis (5.6 cents) a kilogram; wheels, taxed in the 1896 tariff 28 milreis ($3.92) and 14 milreis ($1.96) a pair for carriages and 20 milreis ($2.80) or 10 milreis ($1.40) for wagons, are taxed in the 1897 tariff 650 reis (9.1 cents) a kilogram for wooden and 450 reis (6.3 cents) a kilogram for wooden and iron; tongues, taxed at 5.600 milreis (78.4 cents) for unfinished and 44.800 milreis ($6.27) for complete, are in the 1897 tariff taxed 650 reis (9.1 cents) a kilogram for wooden and 450 reis (6.3 cents) for wooden and iron; parts and appurtenances not specially mentioned reduced from 67 per cent to 60 per cent ad valorem.

Drugs, chemicals, etc.—Acids increased from 15 per cent to 25 per cent ad valorem; mineral waters reduced from 2 milreis (28 cents) and 1 milreis (14 cents) a kilogram for English and distilled to 500 reis (7 cents) a kilogram, while other waters are increased from 400 reis (5.6 cents) to 500 reis (7 cents) a kilogram; gun cotton reduced from 8 milreis ($1.12) to 4 milreis (56 cents) a kilogram; ammonia reduced from 500 reis (7 cents) to 150 reis (2.1 cents) a kilogram; balsam reduced from 4 milreis (56 cents) to 2 milreis (28 cents) a kilogram; benzine reduced from 300 reis (4.2 cents) to 200 reis (2.8 cents) a kilogram; medicated biscuit increased from 2 milreis (28 cents) to 2.500 milreis (35 cents) a kilogram; capsules reduced from 29.280 milreis ($4.099) to 20 milreis ($2.80) a kilogram; medicinal beers and malts increased from 1 milreis (14 cents) to 2 milreis (28 cents); medicated chocolate increased from 2 milreis (28 cents) to 3 milreis (42 cents) a kilogram; preserves and medicinal opiates reduced from 2 milreis (28 cents) to 1 milreis (14 cents) a kilogram; creosote reduced from 2.400 milreis (33.6 cents) to 1 milreis (14 cents) for mineral and 2 milreis (28 cents) for vegetable a kilogram; disinfectants changed from 500 reis (7 cents) a kilogram to 25 per cent ad valorem; elixirs and medicinal liquors reduced from 6.225 milreis (87.2 cents) to 3.200 milreis (44.8 cents) a kilogram; plasters, oiled, reduced from 16 milreis ($2.24) to 8 milreis ($1.12) a kilogram; plasters, adhesive, reduced from 5 milreis (70 cents) to 2 milreis (28 cents) a kilogram; homeopathic pills reduced from 4 milreis (56 cents) to 2.400 milreis (33.6 cents) a kilogram; medicinal drops increased from 3.600 milreis (50.4 cents) to 4 milreis (56 cents) a kilogram; medicinal injections increased from 2 milreis (28 cents) to 3.200 milreis (44.8 cents) a kilogram; liniments reduced from 4 milreis (56 cents) to 3.200 (44.8 cents) a kilogram; naphtha and naphthalene reduced from 6 milreis (84 cents) to 100 reis (1.4 cents) and 200 reis (2.8 cents) a kilogram; chemical and medicated paper reduced from 4 milreis (56 cents) to 3.200 milreis (44.8 cents) a kilogram; tabules and lozenges reduced from 54 milreis ($7.56) to 40 milreis ($5.60) a kilogram; pills, grains, etc., reduced from 62 milreis ($8.68) to 45 milreis ($6.20) a kilogram; soaps, tariff in 1896, 2 milreis (28 cents), and in 1897, 1.500 milreis (21 cents) and 3 milreis (42 cents); salves, pomades, etc., increased from 2 milreis (28 cents) to 4 milreis (56 cents) a kilogram; dyes paying from 2 milreis (28 cents) to 20 milries ($2.80) in 1896 are taxed in 1897, 5 milries (70 cents) a kilogram; vaseline is reduced from 2 milreis (28 cents) to 500 reis (7 cents) a kilogram; wines, bitter, 700 reis (9.8 cents); vermouth, 700 reis (9.8 cents); all others, 6.225 milreis (87 cents), classed under one head in 1897, paying 3 milreis (42 cents) a kilogram; sirups reduced from 6.225 milreis (87 cents) to 3 milries (42 cents) a kilogram; chemicals and drugs, specified in the tariff and subjected to specific duties, equivalent in 1896 to 48 per cent ad valorem, are increased 50 per cent in 1897.

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* The reductions to United States currency have been made on the basis of 1 milreis=14 cents, which was the market average January 3, 1898, although the nominal value of the milreis, according to the United States Director of the Mint, is 54.6 cents.

† 1 kilogram=2.2046 pounds.

Clocks, watches, etc.—Copper clock keys increased from 1 milreis (14 cents) to 2 milreis (28 cents) a kilogram; alarm clocks reduced from 3.200 milreis (44.8 cents) to 2 milreis (28 cents) each; watches, copper or nickel, 4 milreis (56 cents) in 1896 tariff, and 4 milreis (56 cents) and 2 milreis (28 cents), respectively, in 1897; silver reduced from 7.800 milreis ($1.092) to 4 milreis (56 cents); gold reduced from 15.600 milreis ($2.184) to 10 milreis ($1.40) each; chronometers, in 1897 tariff, pay each, gold, 30 milreis ($4.20 cents), silver 8 milreis ($1.12), copper 8 milreis ($1.12), all others 4 milreis (56 cents); when set with precious stones, increased from 13 per cent to 20 per cent ad valorem.

Clocks (not chronometers) paid 48 per cent ad valorem in 1896; the rate in 1897 is:

For walls: Case less than 65 centimeters (25.79 inches) in length, 5 milreis (70 cents) each; over 65 centimeters and less than 100 (39.37 inches), 6 milreis (84 cents) each; over 100 centimeters, 8 milreis ($1.12) each.

For table: With case less than 65 centimeters in length, 4 milreis (56 cents) each; over 65 centimeters, 6 milreis (84 cents) each; of bronze, plated, alabaster, etc., 50 per cent ad valorem.

Chronometers for vessels increased from 64 milreis ($8.96) to 70 milreis ($9.80) each.

Coal, etc.—Coal remains on the free list, while carbon is reduced from 700 reis (9.8 cents) to 200 reis (2.8 cents) a kilogram.

Cottons, etc.—Lace strings increased from 10 milreis ($1.40) to 10.400 milreis ($1.456) a kilogram; carpets reduced from 2.400 milreis (33.6 cents) and 3.100 milreis (43.4 cents) to 2.400 milreis (33.6 cents); hats, untrimmed, reduced from 1.600 milreis (22.4 cents) to 1.200 milreis (16.8 cents); hats, brimmed, increased from 3.100 milreis (43.4 cents) a kilogram to 50 per cent ad valorem; bed covers increased from 1.300 milreis (18.2 cents) to 1.500 milreis (21 cents); cords reduced from 1.600 milreis (22.4 cents) and 2.800 milreis (39.2 cents) to 1.400 milreis (19.6 cents) a kilogram;

cushions reduced from 3.400 milreis (47.6 cents) to 2.400 milreis (33.6 cents); tulle reduced from 23 milreis ($3.22) and 10 milreis ($1.40) to 18 milreis ($2.52) and 5 milreis (70 cents); cravats increased from 2.600 milreis (36.4 cents) to 3 milreis (42 cents) a dozen; handkerchiefs reduced from 78 per cent to 60 per cent ad valorem; blankets reduced from 2.500 milreis (35 cents) to 1.600 milreis (22.4 cents); mantles, capes, etc., reduced from 78 per cent ad valorem to 1.800 milreis (25.2 cents) a kilogram, equivalent to 60 per cent ad valorem; stockings reduced from 3.200 milreis (44.8 cents) and 25 milreis ($3.40) to 3.200 milreis (44.8 cents) and 20 milreis ($2.80) a dozen; netting increased from 3.600 milreis (50.4 cents) to 4.800 milreis (67.2 cents) a kilogram; laces reduced from 62 per cent to 60 per cent ad valorem, from 26 milreis ($3.64) to 20 milreis ($2.80) a kilogram; shirts, knitted, reduced from 10.400 milreis ($1.45) to 8 milreis ($1.12), 19.500 milreis ($2.73) to 15 milreis ($2.10), and from 37.700 milreis ($5.18) to 30 milreis ($4.20) a dozen; drawers, knitted, 9.900 milreis ($1.39) to 8 milreis ($1.12); drawers, other textures, 16.900 milreis ($2.37) to 13 milreis ($1.82); collars reduced from 4.700 milreis (65.8 cents) to 3.600 milreis (50.4 cents); bosoms, for shirts, reduced from 13 milreis ($1.82) to 8 milreis ($1.12) a kilogram; cuffs reduced from 6.200 milreis (86.8 cents) to 5 milreis (70 cents) a dozen; all other clothing, from 9.900 milreis ($1.39) plain and 78 per cent ad valorem embroidered to 60 per cent; embroidery, tulle, reduced from 52 milreis ($7.28) to 35 milreis ($4.90) a kilogram; muslin and cambric embroidery reduced from 26 milreis ($3.64) to 20 milreis ($2.80); fustian embroidery reduced from 13 milreis ($1.82) to 10 milreis ($1.40); window screens reduced from 6.300 milreis (88.2 cents) to 5 milreis (70 cents) each; veiling reduced from 62 per cent to 60 per cent ad valorem; gauzes, lawns, etc., from 9.100 milreis ($1.27) to 8 milreis ($1.12) a kilogram.

It is impossible to make any comparison of duties on cotton cloth. The new duties are estimated on the number of threads contained in 5 square millimeters. It is apparent, however, that they are much increased. For instance, crude unbleached cotton in the 1896 tariff paid 1.500 milreis (21 cents) a kilogram, while in the present tariff it is subjected to duties ranging between 1.500 milreis (21 cents) and 14 milreis ($1.96) a kilogram, according to its texture; bleached cotton paid 2.400 milreis (33.6 cents) a kilogram in 1896, and in 1897 between 2.200 milreis (30.8 cents) and 20 milreis ($2.80); prints now pay 3.600 milreis (50.4 cents), against 3.400 milreis (47.6 cents) and 16 milreis ($2.24).

Flax, hemp, and jute.—Flax, crude, increased from 10 reis (0.1 cent) to 20 reis (0.2 cent) a kilogram; hemp, same; tow, same; oakum, same; jute increased from 10 reis (0.1 cent) and 40 reis (0.5 cent) to 100 reis (1.4 cents) and 130 reis (1.8 cents) a kilogram; linen thread increased from 500 reis (7 cents) and 600 reis (8.4 cents) to 640 reis (8.9 cents) and 840 reis (11.7 cents) a kilogram; carpets reduced from 3.100 milreis (43.4 cents) and 2.400 milreis (33.6 cents) to 2 milreis (28 cents) a kilogram; hemp and other textiles reduced from 900 reis (12.6 cents) to 750 reis (10.5 cents) a kilogram; buttons reduced from 3.900 milreis (54.6 cents) to 3 milreis (42 cents); canvas, cambrics, ducks, etc., reduced on plain from 1.200 milreis (16.8 cents) and 16.900 milreis ($2.36) to 900 reis (12.6 cents) and 13 milreis ($1.82); on imitation sail cloth 3.900 milreis (54.6 cents) to 3 milreis (42 cents) a kilogram; chales, plain, reduced from 7.300 milreis ($1.02) and 26 milreis ($3.64) to 3.600 milreis (50.4 cents) and 20 milreis ($2.80); tape reduced from 3.700 milreis (51.8 cents) to 1.400 milreis (19.6 cents) and 2.800 milreis (39.2 cents) a kilogram; parasol covers reduced from 6.500 milreis (91 cents) to 6 milreis (84 cents); mantles reduced from 78 per cent to 60 per cent ad valorem; laces reduced from 62 per cent to 60 per cent; shirts reduced from 16.900 milreis ($2.36) and 67 milreis ($9.38) to 13 milreis ($1.92) and 52 milreis ($7.28) a dozen; drawers reduced from 31 milreis ($4.34) to 24 milreis ($3.36) a dozen; collars reduced from 4.700 milreis (65.8 cents) to 3.600 milreis (50.4 cents); shirt bosoms reduced from 20.800 milreis ($2.91) to 12 milreis ($1.68); cuffs

6.500 milreis (91 cents) to 5 milreis (70 cents) a dozen; all other clothing reduced from 13 milreis ($1.82) to 12 milreis ($1.68) a kilogram; clothing, embroidered, reduced from 78 per cent to 60 per cent.

Machinery, hardware, etc.—Steels for sharpening knives, handles of mother-of-pearl, ivory, etc., increased from 15 milreis ($2.10) to 33 milreis ($4.62) a dozen; stills taken from free list and taxed 15 per cent ad valorem; machines for refining and crystallizing sugar transferred from free list to 15 per cent ad valorem; locomotives, agricultural, mining, manufacturing, navigating machinery, etc., printing presses, presses for baling, lathes, type, etc., taken from free list and charged 15 per cent ad valorem; mortars reduced from 500 reis (7 cents), 600 reis (8.4 cents), and 1 milreis (14 cents) to 300 reis (4.2 cents) and 500 reis (7 cents), and bronze mortars increased from 1 milreis (14 cents) to 1.600 milreis (22.4 cents); crucibles increased from 700 reis (9.8 cents) to 1.500 milreis (21 cents); wheelbarrows increased from 3 milreis (42 cents) to 4 milreis (56 cents), 6 milreis (84 cents), and 7.500 milreis ($1.05) each; glass cutters reduced from 4 milreis (56 cents) to 2.500 milreis (35 cents) each; forges reduced from 400 reis (5.6 cents) to 200 reis (2.8 cents) a kilogram; iron tools, including hammers, hatchets, scythes, picks, etc., reduced from 200 reis (2.8 cents) to 150 reis (2.1 cents) a kilogram; typewriters are given a special tax of 30 milreis ($4.20) each; bicycles, 50 milreis ($7); copper wire, plain, is reduced from 1 milreis (14 cents) to 400 reis (5.6 cents) a kilogram; copper wire, insulated with cotton, paper, or rubber, reduced from 1.600 milreis (22.4 cents) to 900 reis (12.6 cents) a kilogram; copper wire, plated, gilded, or covered with silk, reduced from 4.200 milreis (58.8 cents) to 2.400 milreis (33.6 cents) a kilogram; wire prepared for telegraph, telephone, or electric-light lines, pays 20 per cent ad valorem; iron in bars is increased from 60 reis (0.8 cent) to 100 reis (1.4 cents) a kilogram; steel in rods increased from 100 reis (1.4 cents) to 120 reis (1.6 cents); needles reduced from 4.800 milreis (67.2 cents) to 4 milreis (56 cents) a kilogram; cables reduced from 300 reis (4.2 cents) to 200 reis (2.8 cents) a kilogram; hooks increased from 3.200 milreis (44.8 cents) to 3.600 milreis (50.4 cents) a kilogram; steel ornaments, watch chains, breastpins, etc., increased from 10.400 milreis ($1.456) to 12 milreis ($1.68) a kilogram; buttons increased from 1 milreis (14 cents) and 2.600 milreis (36.4 cents) to 2 milreis (28 cents) and 3 milreis (42 cents) a kilogram; padlocks reduced from 1 milreis (14 cents) and 3.200 milreis (44.8 cents) to 800 reis (9.6 cents) and 3 milreis (42 cents) a kilogram; spurs reduced from 12 milreis ($1.68) and 8 milreis ($1.12) to 10 milreis ($1.40) and 6 milreis (84 cents) a kilogram; stirrups reduced from 5.600 milreis (78.4 cents) and 2.800 milreis (39.2 cents) to 3 milreis (42 cents) and 2 milreis (28 cents) a kilogram; locks reduced from 700 reis (9.8 cents) and 2 milreis (28 cents) to 600 reis (8.4 cents) and 1.500 milreis (21 cents); screws increased from 900 reis (12.6 cents) to 1.500 milreis (21 cents) a kilogram; rails weighing more than 10 kilograms (22.046 pounds) to the meter (39.36 inches), free in 1896, pay 15 reis (0.2 cent) on the kilogram in 1897; bolts, clamps, screws, etc., for rails, free in 1896, pay 80 reis (1.1 cents) to the kilogram; building materials (iron or steel) reduced from 25 per cent to 20 per cent ad valorem; pistol barrels reduced from 1.700 milreis (23.8 cents) to 1.500 milreis (21 cents) a kilogram; gun barrels reduced from 3.400 milreis (47.6 cents) to 3 milreis (42 cents); balls (lead or iron) reduced from 90 reis (1.2 cents) and 400 reis (5.6 cents) to 50 reis (0.7 cent) and 300 reis (4.2 cents) a kilogram; muskets, rifles, etc. (military), reduced from 8.400 milreis ($1.17) to 8 milreis ($1.12) each; shotguns, rifles (for sport), two barrels, reduced from 12.900 milreis ($1.80) to 10 milreis ($1.40) each; pistols reduced from 6.700 milreis (93.8 cents) to 4.800 milreis (67.2 cents) a pair; revolvers reduced from 1.400 milreis (19.6 cents) to 1 milreis (14 cents) for each chamber.

Crockery and glassware.—China ornaments, bracelets, earrings, breastpins, etc., increased from 10.400 milreis ($1.45) to 12 milreis ($1.68) a kilogram; tiles, from 200 reis (2.8 cents) a kilogram to 2 milreis (28 cents) for each square meter (1,550 square inches); vases, jars, etc., reduced from 2.400 milreis (33.6 cents) and 5.700 milreis (79.8 cents) to 2.500 milreis (35 cents) and 3.700 milreis (51.8 cents) a kilogram; electrical appurtenances pay 200 reis (2.8 cents) in 1897; glass ornaments increased from 10 milreis ($1.40) to 12 milreis ($1.68) a kilogram; vases, jars, etc., reduced from 3.400 milreis (47.6 cents) and 5.200 milreis (72.8 cents) to 2.800 milreis (39.2 cents) and 4 milreis (56 cents) a kilogram; tiles reduced from 300 reis (4.2 cents) to 150 reis (2.1 cents) a kilogram; tableware reduced from 700 reis (9.8 cents) and 1.600 milreis (22.4 cents) to 600 reis (8.4 cents) and 1.200 milreis (16.8 cents) a kilogram; druggists' ware reduced from 1.200 milreis (16.8 cents) and 2.600 milreis (36.4 cents) to 1 milreis (14 cents) and 2 milreis (28 cents) a kilogram.

Gunpowder.—Reduced from 1.800 milreis (25.2 cents) to 1.300 milreis (18.2 cents) a kilogram; dynamite and other explosives reduced from 1.700 milreis (23.8 cents) to 1.300 milreis (18.2 cents) a kilogram.

Mathematical, surgical, and dental instruments.—Remain practically unchanged, with tax of 15 per cent ad valorem.

Food products.—Lard reduced from 400 reis (5.6 cents) to 300 reis (4.2 cents) a kilogram; preserved meats reduced from 1.800 milreis (25.2 cents) to 1 milreis (14 cents) a kilogram; meat extracts increased from 5.200 milreis (72.8 cents) to 6 milreis (84 cents) a kilogram; condensed milk reduced from 700 reis (9.8 cents) to 500 reis (7 cents) a kilogram; eggs reduced from 300 reis (4.2 cents) a kilogram to free list; codfish reduced from 80 reis (1.1 cents) to 60 reis (0.8 cent) a kilogram; preserved fish reduced from 1 milreis (14 cents) and 1.500 milreis (21 cents) to 800 reis (11.2 cents) and 1.200 milreis (16.8 cents) a kilogram; cheese reduced from 1.500 milreis (21 cents) to 1.200 milreis (16.8 cents) a kilogram; soaps reduced from 200 reis (2.8 cents), 400 reis (5.6 cents), 700 reis (9.8 cents), and 1.200 milreis (16.8 cents) to 400 reis (5.6 cents) a kilogram; bacon reduced from 300 reis (4.2 cents) to 200 reis (2.8 cents).

Oils.—Animal oil, purified for machines, increased from 1 milreis (14 cents) to 1.200 milreis (16.8 cents) a kilogram; cod-liver oil reduced from 1.300 milreis (18.8 cents) to 1 milreis (14 cents) a kilogram; kerosene reduced from 200 reis (2.8 cents) to 70 reis (0.9 cent) a kilogram.

Lumber.—Pine, in the rough, reduced from 1.500 milreis (21 cents), 3.200 milreis (44.8 cents), 6.800 milreis (95.2 cents), and 12.600 milreis ($1.76) per meter (39.37 inches), according to thickness, to 1.100 milreis (15.4 cents), 2.300 milreis (32.2 cents), 4.800 milreis (67.2 cents), and 8.800 milreis ($1.23); pine boards reduced from 18.800 milreis ($2.63) to 13.200 ($1.84) per square meter.

Furniture: Benches (opening and closing) reduced from 2.200 milreis (30.8 cents) to 1.600 milreis (22.4 cents) each; stools for piano reduced from 18.700 milreis ($2.61) to 16 milreis ($2.24) each; trays reduced from 13 milreis ($1.82) to 8 milreis ($1.12) a kilogram; rowboats reduced from 48 per cent to 20 per cent ad valorem; cradles reduced from 18 milreis ($2.52) and 54 milreis ($7.56) each to 12 milreis ($1.68) and 48 milreis ($6.72); hobbyhorses from 11 milreis ($1.54) and 25 milreis ($3.50) each to 10 milreis ($1.40) and 20 milreis ($2.80); racks reduced from 1.700 milreis (23.8 cents) and 5.200 milreis (72.8 cents) to 1 milreis (14 cents) and 4 milreis (56 cents) a kilogram; chairs (straw seat) reduced from 9.200 milreis ($1.26) and 4.600 milreis (64.4 cents) to 7 milreis (98 cents) and 3.500 milreis (49 cents) each; rocking-chairs reduced from 10 milreis ($1.40) and 6.800 milreis (95.2 cents) to 9 milreis ($1.26) and 6 milreis (84 cents) each; chairs (fine wood) reduced from 24 milreis ($3.36) and 13 milreis ($1.82) to 20 milreis ($2.80) and 10 milreis ($1.40) each; rocking-chairs of fine wood reduced from 32 milreis ($4.48) and 18 milreis ($2.52) to 25 milreis ($3.50) and 14 milreis ($1.96); beds (fine wood) reduced from 104 milreis ($14.56), 176 milreis ($24.64), and 52 milreis ($7.28) to 80 milreis ($11.20), 130 milreis ($18.20), and 40 milreis ($5.60) each; commodes (fine wood) reduced from 62 milreis ($8.68), 104 milreis ($14.56), and 156 milreis ($21.84) to 48 milreis ($6.72), 80 milreis ($11.20), and 120 milreis ($16.80) each; corks reduced from 400 reis (5.6 cents) to 300 reis (4.2 cents) a kilogram; washstands (fine wood) reduced from 36.400 milreis ($5.09), 65 milreis ($9.10), and 109.200 milreis ($15.28) to 28 milreis ($3.92), 50 milreis ($7), and 84 milreis ($11.76) each; tables (fine woods) reduced from 9.400 milreis ($1.31), 31 milreis ($4.34), 109 milreis ($15.26), and 176 milreis ($24.64) to 7.200 milreis ($1.08), 24 milreis ($3.36), 84 milreis ($11.76), and 136 milreis ($19.04); desks (fine wood) reduced from 78 milreis ($10.92), 171 milreis ($23.94), and 260 milreis ($36.40) to 60 milreis ($8.40), 140 milreis ($19.60), and 200 milreis ($28); furniture in general increased from 48 to 50 per cent ad valorem; furniture of fine woods reduced from 78 per cent to 60 per cent; builders' supplies reduced from 30 per cent to 20 per cent.

Gold, silver, jewelry, etc.—Dentists' gold increased from 15.600 milreis ($2.18) to 45 milreis ($6.30) a kilogram; jewelry with precious stones increased from 7 per cent to 15 per cent ad valorem; same, with false stones, increased from 300 reis (4.2 cents) to 400 reis (5.6 cents) a kilogram; dentists' silver reduced from 15.600 milreis ($2.18) a kilogram to 12 milreis ($1.68).

Rosin.—Reduced from 1 milreis (14 cents) to 400 reis (5.6 cents) a kilogram. Turpentine, common, reduced from 200 reis (2.8 cents) to 150 reis (2.1 cents) a kilogram.

Whisky, brandy, etc.—Increased from 1.400 milreis (19.6 cents) to 1.500 milreis (21 cents) a kilogram; beer reduced from 1.200 milreis (16.8 cents) to 750 reis (10.5 cents) a kilogram.

Preserved fruits, jellies, etc.—Reduced from 1.500 milreis (21 cents) to 1.200 milreis (16.8 cents) a kilogram.

Comparison of the average equivalent ad valorem duty of the several classes.

Class.	1896.	1897.	Class.	1896.	1897.
	Per cent.	*Per cent.*		*Per cent.*	*Per cent.*
Animals	39	30	Silk	57	57
Hair and feathers	69	50	Paper	42	48
Skins, hides, etc	54	55	Stone, earths, and minerals	36	34
Meat, fish, etc	38	42	Crockery, glass, etc	46	49
Ivory, mother-of-pearl	38	39	Gold, silver, etc	5	15
Fruits	48	50	Copper	46	48
Cereals, flours, etc	30	27	Lead	45	47
Plants, shrubs, and bulbs	38	29	Iron and steel	44	47
Vegetable products, wines, beers, etc	45	46	Metalloids and metals	15	24
Perfumeries, paints, etc	34	41	Arms, armament, etc	48	53
Chemical products, drugs, etc	43	40	Cutlery	48	50
Woods, lumber, etc	51	50	Watches, clocks, etc	39	39
Products of cane, bamboo, etc	47	50	Carriages, etc	51	50
Straws, etc	46	48	Mathematical instruments	20	19
Cottons	52	56	Surgical and dental instruments	16	15
Wool, etc	53	53	Musical instruments	48	50
Flax, hemp, etc	49	41	Machinery, etc	36	35
			Miscellaneous	49	49

TARIFF CHANGES IN VENEZUELA.

I inclose a Spanish copy with English translation of a recent decree of the Venezuelan Government by which the trisulphite (trisulfito) of lime, which is greatly used in the sugar-cane industry, has been put on the free list of the tariff law on importation.

E. H. PLUMACHER,
Consul.

MARACAIBO, *February 28, 1898.*

[Translation.]

DECREE.

UNITED STATES OF VENEZUELA,
TREASURY DEPARTMENT, DIVISION OF CUSTOMS,
Caracas, January 18, 1898.

Application having been made to this Department by Luis Forsyth, soliciting from the Government the classification of trisulphite (trisulfito) of lime, as the same is not included in the tariff list of importations and as he is desirous of introducing it into the country, it being considered of great importance to our cane industry; and the President of the Republic, having been informed that the trisulphite of lime is a substance which greatly improves the cane products, increases the returns, and diminishes the expenses of preparation, making use of the power granted to him in article 8 of the tariff law, has decided that whenever said substance is introduced through the custom-houses of the Republic it shall be put on the first class of the tariff.

For the National Executive.

S. ESCOBAR.

TARIFF-INFORMATION BUREAU IN GERMANY.

To advance the export trade is the desire of all the leading commercial nations. They endeavor to accomplish this end by every possible means. One of the newer devices is the establishment of commercial bureaus, which have the double purpose of furnishing the exporter with details as to markets for his goods abroad and of saving the importer trouble by giving him exact information concerning customs requirements (declaration of merchandise, etc.).

The creation of commercial attachés at legations and embassies, commercial museums at important cities, commercial agencies, and the like, are all links in the chain to strengthen export trade. Among these must be counted tariff-information bureaus. England took the initiative by establishing the imperial institute to assist her exporters. France wishes to follow by creating a national bureau of foreign commerce,* intended to give merchants suitable hints concerning their exports. Germany is now establishing a tariff-information bureau, from which those merchants who are desirous of introducing new articles from abroad may get authentic information as to customs requirements. While, therefore, the imperial institute and the French national commercial bureau are meant to facilitate exports of those countries, the German tariff-information bureau will rather aid the imports. All of these institutions are of vast practical value to the exporter and importer.

Each year, as the competition becomes keener, such new factors as these spring into existence. The customs committee of the Bundesrath and the committee on commerce and intercourse have recently drawn up regulations as to official information on tariff questions, with the instruction that they are to enter into force on April 1, 1898. According to these regulations, certain advisory boards are to be established, to give information on customs duties, weights, etc. The inquirer has to state, among other details, whether he has already addressed the same inquiry to another advisory board, and, if so, what reply he received; further, whether and through which custom-house the goods concerned have already been imported by him, or, to his knowledge, by others, and under what customs ruling they then came. The inquiry must be accompanied by an exact description of the goods and, if possible, by samples. Besides the expenses for examination and carriage, no costs are charged. A decision rendered may be revoked by the legislature, or by other Executive regulations made public. But if a decision given is changed by the advisory board itself—the highest finance authority—or the Bundesrath, in such a manner that the goods are subjected to a higher duty within three months after the first decision, such goods, if the inquirer proves them to have been ordered on the strength of the first decision, will not be subjected to a post levying of the additional duties. Notice of a change of decision is to be forwarded to the inquirer within twelve months.

These new regulations permit a protection from losses. Nevertheless, the importer, if he has not asked for information, incurs the danger of post payment at any time within a year when an article has been admitted at too low a duty by the customs authorities.

THOS. EWING MOORE,
Commercial Agent.

WEIMAR, *February 23, 1898.*

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* See CONSULAR REPORTS No. 210 (March, 1898) p. 323.

CUSTOMS DUTIES IN BULGARIA.

A note has been received by the Department from Mr. F. Elliot, the British agent and consul-general at Sofia, dated February 17, 1898, inclosing a copy of a resolution published in the Official Gazette on February 4, 1898, according to which the rates of import duty established by commercial conventions with Great Britain, Austria-Hungary, Italy, France, and Servia are made also applicable to products of the United States. Besides customs duties, says Mr. Elliot, foreign goods entering Bulgaria are liable to certain octroi taxes.

The resolution is translated as follows:

RESOLUTION CONCERNING THE IMPOSITION OF CUSTOMS DUTY ON THE PRODUCTIONS OF COUNTRIES WHICH HAVE NO TREATY OF COMMERCE WITH BULGARIA.

ARTICLE 1. The productions of countries which have no treaty of commerce with Bulgaria, but which have already declared, or which shall declare, that Bulgarian products shall enjoy with them the rights of the most-favored nation, on condition that their productions shall enjoy the same rights in Bulgaria, shall be taxed with the customs duty established by the treaties and the tariffs agreed upon by the Government and foreign countries.

ART. 2. The productions of countries which have no treaty of commerce with Bulgaria, but which have already enjoyed in Turkey the condition of the most-favored nation, or which have already had commercial arrangements with Bulgaria, viz, Belgium, Switzerland, Roumania, the United States, and Greece, as well as Turkey, shall be taxed with the same customs duty as the productions of the countries mentioned in the preceding article.

ART. 3. The productions of countries which are not included in the category of the countries enumerated in the two preceding articles are taxed with customs duty: (*a*) according to the tariffs which accompany the treaties of commerce concluded with Austria-Hungary, Servia, Italy, France, England, and Russia, if this duty is 14 per cent or above, or if it is a specific duty; (*b*) of 14 per cent, if it is less in the tariffs in question.

ART. 4. The tariff of 1883 relative to goods imported from Turkey, Roumania, Servia, etc., is abolished.

TRADE-MARKS IN DENMARK.

This consulate has been requested by a Boston firm to investigate an alleged infringement of its trade-mark, and, as the result of the investigation may be of interest to American manufacturers and exporters, I have the honor to submit the following report:

The said firm has, for over a quarter of a century, been selling its goods (peerless gloss for shoes) in Denmark, and has built up quite a large trade, the article now being for sale in almost every shoemaker's store throughout the Kingdom. A Danish manufacturer, in the same line of business, recently thought it a good idea to imitate the labels and also the bottles used by the American firm, having found out that it had not registered its trade-mark here, although it is registered in the United States and Great Britain. The labels used by the imitator are in Danish, and bear his name, but otherwise they are identical with the American firm's labels and bottles. This "counterfeit" was registered here at the Danish trade-mark registration office, and, according to law, duly advertised in the Danish newspapers. No objection was raised within the four months after registration, as stipulated by law, and the said trade-mark is now the Danish manufacturer's property.

Should American manufacturers or exporters wish to have their trade-marks registered in Denmark, they should appoint an attorney here; and, if they desire it, I am willing to act for them. My address is 30 Kronprinsessegade, Copenhagen. I inclose translation of a power of attorney (Form No. 1) and an agreement (Form No. 2). These documents, in order to be legal in Denmark, must be signed in the presence of a Danish consul in the United States.

JULES BLOM,
Vice-Consul.

COPENHAGEN, *February 8, 1898.*

POWER OF ATTORNEY.—FORM NO. 1.

(This form must be accompanied with $20 to cover the charges for advertising, registering, and attorney's fees.)

The undersigned [here give the petitioner's full name, profession, post-office address, and residence, or, if a firm, the place where the factory is situated] requests hereby the registration in the trade-mark register of the following trade-mark:

[Describe the mark, and, if the right to the trade-mark covers only certain kinds of merchandise, describe the kind of merchandise.]

The petition should be accompanied by—

(1) A facsimile of the trade-mark on strong paper, in triplicate, not over 10 centimeters (3.937 inches) long and 15 centimeters (5.9 inches) wide.

(2) Two clichés (blocks or casts) of the same size as the facsimile, suitable for the printing of the mark.

(3) Certificate proving that the petitioner has fulfilled the conditions required in his country for securing protection for his trade-mark, *i. e.*, a copy of such register.

(4) The petitioner's declaration that he accepts the Copenhagen marine and commercial court as arbiter for all matters concerning the said trade-mark, and that Mr. ———, residing at ———, can, on behalf of the petitioner, act for him in eventual lawsuits.

The date and signature follow.

As already stated, the certification of the Danish consul must accompany the petition.

AGREEMENT.—FORM NO. 2.

The undersigned [petitioner's full name and residence, or, if a firm, the place where the factory is situated] intends, in compliance with the law of April 11, 1890, of the Kingdom of Denmark, for the protection of trade-marks, to submit a trade-mark for registration in the royal Danish trade-mark register, and hereby declares that he (or they) accepts the royal Danish marine and commercial court in Copenhagen as arbiter in all matters pertaining to said trade-mark, and that [give the attorney's profession and full name], who resides at [give residence], can represent him (or them) in eventual lawsuits.

Date and signature.

Certificate of Danish consul.

FRENCH AND GERMAN COMMERCE.

France, like England, has been forced to consider in what way the decline of her export trade may be arrested. A committee has recently been formed in France in the interest of trade, and will soon meet to organize the country's commercial defense. The Leipziger Tageblatt recently published the following article in this connection:

The blunder of attributing the decline in exports to Germany's expanding trade is not committed in France, as has been done in England. It is admitted that German competition does much harm to French commerce, but other reasons for the decadence are put forward. French exports were 40,000,000 francs ($8,000,000) less in 1896 than fifteen years before. This falling off is partly attributed to the fact that countries which were formerly buyers of French goods—furniture, for instance—have become independent. Further, many other countries have established high protective tariffs, thereby excluding French goods.

As a means of reviving exports, the French look, in the first place, to the centralization of industry. For this purpose, the above-mentioned committee was created. The formation of a closer commercial-political union of the Latin nations will be attempted. French colonies will be extended and efforts made to induce them to buy French products.

And, lastly, large sums having been granted for the increase of the navy during the past year, the development of the merchant marine is to receive greater attention. In this respect, the French point with a certain jealousy to the growth of the German merchant marine and the recent great achievements in German shipbuilding.

These details are of interest and importance to Germany. First, it is clear that France will make exertions to regain the markets lost through German competition. This should cause the Germans to strengthen the position they have won. To this end, we must study the reasons given by the French for the falling off in their exports and their plans for increasing them. The causes of decline in their exports are equally a menace to those of Germany. Germany must also face the contingency of a loss of part of her foreign markets, because certain countries will make themselves industrially independent. Germany resents the high protective tariff of former large buyers, by which they now seclude themselves. Therefore, she, too, must think of measures to balance the probable decrease.

The French plan of centralization is certainly not necessary for Germany. This country has a number of large commercial centers, which, though in touch with each other, are thoroughly independent. Under just these conditions German commerce has thriven. The French plan to further commerce by the extension of trade with the colonies and the development of the merchant marine must be weighed by Germany also. We, too, must consider the enlarging of colonial possessions and their development in order to gain a sure territory, which can not be suddenly closed by the caprice of outsiders, for our exports. In like manner, Germany must further direct her attention to the increase of her navy. As to the merchant marine, we would speak here of the question of subsidizing steamship lines. Although at the present time Germany's merchant marine may be superior to that of France, the navy compares unfavorably with those of other countries. For this purpose the French have appropriated large sums, and Germany must follow, in a modest scale, in the interests of her trade.

THOS. EWING MOORE,
Commercial Agent.

WEIMAR, *February 24, 1898.*

LABOR CONDITIONS IN EUROPE.

The following paragraph has been heralded through the United States in recent times: "The European laborer gets small wages, but the cost of living there is proportionately small." If the paragraph had read, "The European laborer gets small wages, but the manner in which he lives makes living cheaper there than in the United States," the truth would have been told.

I desire to make some comparisons which will disclose the actual condition of things relating to the cost of living among the laboring classes in Europe. I will take two skilled workmen in the United States and carefully compare their receipts and expenses, their homes, their mode of life, the cost of their food, clothing, rent, taxes, fuel, and amusements, with men operating in the same department of toil in Europe, and hope that the result may be carefully considered by those who honestly desire to know in what land the great mass of human workers are blessed with the best conditions.

I will take the first examples from two cities, one in the United States and one in a fairly prosperous nation of Europe. The population of each is about 30,000. They are industrial centers, and the commercial surroundings are nearly the same. Both have excellent religious and educational facilities. In both the system of free public schools has been brought to a high state of perfection, so that the children of these workmen have equally good educational advantages. I will select my first examples from the class known as carpenters and joiners, and, in order to bring the comparisons into easy and striking contrast, I present the following statement, giving a single question in one paragraph, followed by two answers—one from the American and the other from the European workman.

Question.—What wages do you receive?

Answer.—American, $2.37 a day; European, 80 cents a day.

Question.—Are you able to support your family?

Answer.—American, Yes, I do so comfortably; European, No, my wife and daughter earn something to help me.

Question.—What are your average yearly earnings?

Answer.—American, $498; European, $230.

Question.—What does it cost you a year to live?

Answer.—American, about $412, my family consisting of a wife and two chldren; European, $251, my family consisting of a wife and three children.

This shows a surplus for the American of $86, and a deficit for the European of $21, which is covered by the earnings of his wife and daughter.

Question.—Of what does your daily food consist?

Answer.—American, coffee, tea, milk, sugar, meats (such as steaks, roast beef and mutton, ham, bacon, pork, sausages), fresh fish, vegetables of all kinds in season, wheat bread, oatmeal, wheatlets, hominy, buckwheat cakes, butter, eggs, and fruits in season—that is, I have this list, with many other kinds of food, such as canned goods, to select from, and my table is usually amply supplied; European, good bread, potatoes, potato soup, coffee, beer, cider, common wine, and now and then sausage or some ordinary cuts of beef. I may say that our good bread is our real staff of life. It is nourishing, satisfying, and cheap; therefore, it is our chief diet.

Question.—What do you pay for rent?

Answer.—American, from $8 to $10 a month for a good, comfortable house of six rooms located in the suburbs, and to which there is attached a good garden; European, $4 a month for three rooms in the third story (water on first floor), house located in cheap and densely populated part of the city. All fuel and water must be carried up two flights of stairs.

The above is an honest picture of the condition of two skilled workmen, one in the New World and the other in the Old, but both employed in the same department of human labor. It has been drawn from knowledge and not from imagination, and any thoughtful American skilled laborer who views it with intelligence and a genuine desire to know the truth must feel profoundly grateful that his lot and that of his children has been cast on the soil of the great Republic and under the protection of its flag and institutions.

The statement already referred to, to the effect that European laborers get small wages, but that the cost of living there is proportionately small, leads the careless observer to believe that the cost of living is cheaper in Europe than in America. The opposite is the truth.

The difference in the cost of living is accounted for by the difference in the manner of living, and I hope to clearly demonstrate this by another example. Take a locomotive fireman in the United States. I know many of them; I know what wages they receive and how they live. An ordinary locomotive fireman in the United States earns usually $60 a month, and, counting loss of time, he earns on an average about $550 a year at the lowest estimate. European locomotive firemen consider themselves well paid if their earnings amount to $22 per month or $264 per year. As to the manner of living, I am satisfied that one-third of the firemen in the United States possess their own homes, and a large majority of all could be in the same happy condition if they lived on the same economical basis as the European firemen. The homes owned by the American firemen consist of from six to eight rooms. They are usually well built and comfortably furnished. In country towns they are generally surrounded by good gardens. The school facilities for their children are equally as good as those of the European firemen, and I am inclined to believe that they are better in many respects, since the European school experts at the World's Fair in Chicago frankly confessed that, taking everything into consideration, the public-school system of the United States is the best in the world. Thus, it may be seen that the American firemen have the advantage of their fellow-workers in the Old World.

If their educational advantages are equally as good, their food advantages are far better. The ordinary food supply of the American firemen consists of good coffee, tea, sugar, milk, bread, butter, meats of all kinds, fresh fish, fruits, and canned goods of every description, and for nearly every one of these items of food they pay from 6 to 12 per cent less than the cost of the same class and quality of goods in the European markets. While at work, the locomotive firemen of the United States usually wear overalls, but when they cease their labors they become apparently as well dressed as is a merchant, a banker, or a judge of a superior court in either country. An interesting fact is that if these clothes are ready-made, their cost in the American market is no more, and sometimes less, than in the markets of the Old World. To be sure, these clothes made to order would cost less in Europe than in America, because labor is much cheaper in the Old World than in the New. The journeyman tailor in central Europe gets only $5 for sixty-five hours of work, while his fellow-worker in the United States gets $12 for five hours' less work. Every intelligent person realizes that the people of that country where the cost of living is cheapest and the earnings highest are the happiest and will be the most prosperous people on earth.

In the United States, prices for the necessaries of life are lower and the wages of all who labor are higher than in any other country. No one can successfully challenge this assertion. I speak of as necessaries, those things that enter into the making of a comfortable home, as we understand such a home in the United States; such as ample and wholesome food, furniture, fuel, lights, clothing, and cheap transportation by railroad, steamboat, or tram car. To the American workmen, all these things are cheaper than they are to their brother breadwinners in Europe, and, to double this great advantage, their wages are sometimes more than twice as high. But these are not the only advantages American labor has over conditions in the Old World. When workmen go to church in the United States they find a comfortable pew in a warm, well-lighted, and pleasant place of worship. When they go to the theater they occupy good seats. When they travel with their families on the railroad, they ride first class, and, if sober and industrious and of good moral character, as they usually are, they hold a pleasant social position in the community in which they live.

This is a fair and conservative picture of the surroundings, condition, and life of the American firemen.

You may search the continent of Europe from St. Petersburg to Lisbon, from Stockholm to Palermo, and the isles of the Briton from the Hebrides to Brighton in vain for such conditions among railroad men. I am confident that not one-twelfth of the locomotive engineers and firemen of Europe live in their own homes. How can they? The average wages of the engineers is about $320 per annum, and that of the firemen $264; switchmen, $216; watchmen, $240; and prices of food and clothing, rent, fuel, and lights are as high in their markets as in the markets of the United States—I mean, the same kind and quality of food, clothing, fuel, lights, and the same number of rooms as to rent prices.

A locomotive fireman of central Europe receives, on an average, for a week's work of sixty-five hours' time, $5; for a full month's work, $20; and for a year of fair average time, $264. He seldom owns his home. A well-informed person says that he does not know of a single instance where a locomotive fireman in Europe has bought and paid for his home out of his regular earnings. I can name a hundred firemen in my limited knowledge of the personnel of railroads in the United States who own their homes and have paid for them out of the savings from their wages. The European fireman is simply forced, by the conditions that always confront him, to pay rent, and he usually rents rooms and not a house. His quarters generally consist of from two to three rooms, and the rent price is approximately the same as in the United States, taking floor space, location, condition, and conveniences into consideration. His quarters are of necessity in the cheap residence quarter. The facilities for housekeeping are scant, as a rule, and the furnishings very meager, but usually clean and neat. His food consists of coffee and bread for breakfast; potato soup, bread, potatoes, and cheap wine or beer for dinner, and sometimes meat; for supper, bread, beer, or cider, or common wine that costs perhaps 10 cents a liter or quart. For every ounce of this food, except the common wine and beer, he will pay just as much as, and sometimes more than, the American fireman pays for food similar in quality and kind. His coffee, fair Rio, is 32 cents per pound; fair Java costs 35 cents; tea, from 70 cents to $1; sugar, 6 cents; beef, 18 to 25 cents; horseflesh, 5 to 7 cents; bacon, 20 cents; ham, 25 cents; sausages, 22 cents; rice, 6 cents; cheese, from 16 to 26 cents; dried apples, 11 cents; flour, 5 cents; common soap, 7 cents; American canned beef, 18 cents; potatoes, from 40 to 60 cents a bushel; eggs, 15 to 24 cents per dozen; milk, 4 cents a quart; cider, 6 cents a quart; beer, 8 cents a quart; common wine, 19 cents a quart; kerosene, 20 cents a gallon; wood, cut for stove, $10 per cord; coke, $8 per ton; coal, $7 per ton; coarse cowhide shoes, from $2 to $3.50 per pair; cotton overalls, 96 cents; cotton blouse, 96 cents; Sunday suits, from $8 to $18; common coarse suits, from $5 to $8. And, as everybody is taxed in central Europe, the fireman comes in for his share; not on his possessions, for he seldom has any, but on the amount of the meager earnings which he may receive during the year.

The above are the average retail prices for food and clothes, and he who will take the trouble to compare them with prices for the same articles in the American markets will discover that in almost every article the American fireman has the advantage, besides having twice the income with which to make the purchases.

The European firemen usually wear overalls during working hours, and, when they dress after their labors, they present a plain, neat appearance; but their clothes are coarse and never fit as well as those of the American, while the foot and head wear are positively awkward and rough in make and appearance. To these disadvantages, should be added the fact that when the European firemen go to church they find an uncomfortable, poorly heated, poorly ventilated, and sometimes gloomy place of worship; when they go to the theater, they must occupy the poorest places; when they travel with their families on the railroad, they do so in the third-class cars; and, no matter how sober and industrious they may be, they can never hold the same position in the social world that their brother breadwinners do in the United States. But, with all these disadvantages, it must be conceded that the railroad employees of the Old World are usually loyal to the corporations that give them employment and discharge their duties with a fidelity, industry, and care that make them worthy of better wages, better food, better homes, and brighter hopes. Their earnings are small; they can save nothing; their time of toil is long and their chance of advancement slow. Yet, with all these discouraging conditions, they are as sturdy and faithful a class of men as can be found in any department of human labor in the world.

If the conditions were the same in Europe as in the United States—that is, if the locomotive firemen of Europe received the same wages that are paid in the United States—and if they continued to live in the way they do now and practiced the same economy, a service of twenty years would find them in the possession of savings that would place every one of them in his own home and in independent circumstances.

Whenever it is stated in the United States that "the wages in Europe are small, but the cost of living is proportionately small," it should not be forgotten that, while the cost of living among the workmen of Europe is proportionately smaller than among the toilers in the United States, the manner of living is also immeasurably poorer, not only in housing, clothing, and food, but in all conditions; and also the wages are only half the amount paid in our country.

JAMES T. DUBOIS,
Consul-General.

ST. GALL, *February 18, 1898.*

ENGLISH EXPORTS OF COTTON GOODS AND YARN.

Under date of March 11, 1898, Consul Grinnell sends from Manchester the following tables:

Exports of cotton yarn to the United States.

Month.	1896.	1897.
	Pounds.	*Pounds.*
January	174,151½	97,263
February	155,673	92,269¾
March	141,571	146,384¾
April	107,473	254,461¾
May	121,641¾	130,888¾
June	92,484	103,146
July	96,160	67,244½
August	72,519¾	36,103¾
September	68,781¼	46,795
October	71,374	81,001
November	76,399¼	85,588¼
December	113,245½	127,809¼
Total	1,291,474½	1,268,955¼

Total exports of cotton yarn and cotton goods during the two months ending February 28, 1898, in comparison with the same period of the two preceding years, showing the countries to which the yarn has been exported.

Country.	Two months ending February 28—		
	1896.	1897.	1898.
Cotton yarn.	*Pounds.*	*Pounds.*	*Pounds.*
Russia	206,400	187,100	391,100
Sweden and Norway	1,239,300	841,100	1,516,700
Denmark	1,174,700	1,171,700	1,162,100
Germany and transits	7,566,100	6,511,400	6,599,800
Holland and transits	5,245,700	6,110,100	5,404,400
Belgium and transits	1,252,100	1,003,600	1,570,800
France and transits	1,392,100	1,205,400	731,500
Italy	70,000	66,500	49,500
Austria and transits	1,424,400	780,000	1,195,600
Roumania	919,900	1,269,200	1,097,700
Turkey	1,854,100	3,809,800	3,883,900
Egypt	668,700	908,300	892,500
China and Hongkong	1,239,700	2,570,700	1,941,400
Japan	3,971,600	2,254,200	3,412,700
British India:			
Bombay	2,799,400	994,800	2,951,000
Madras	1,964,800	1,987,100	2,947,200
Bengal	3,113,900	2,100,700	3,462,200
Straits Settlements	538,200	827,500	676,300
Ceylon	17,600	3,800	11,100
Other countries	2,806,800	2,624,200	3,159,600
Total	39,465,500	37,227,200	43,057.100
Cotton goods.	*Yards.*	*Yards.*	*Yards.*
Gray or bleached	569,484,500	542,317,100	598,406,500
Printed or dyed	320,889,500	269,030,400	262,275,700
Mixed materials, cotton predominating	115,100	24,400	7,100
Total	890,489,100	811,371,900	860,689,300

THE GERMAN LEATHER INDUSTRY.

In my report dated January 6, 1898,* I mentioned that American dressed leather was finding its way into German markets. Since then I have investigated the matter more thoroughly, and find that American dressed leather is greatly preferred by the local shoe and boot manufacturers to the German article, or, in fact, to that of any other country. It is the fault of our American leather manufacturers and dealers if they do not succeed in gaining a permanent foothold and become formidable competitors in the German markets; provided, of course, that the present import duty on leather remains unchanged.

So far, however, our American leather manufacturers and dealers in general (of course, there are a few exceptions) have not given their export business to this country the proper attention, and seem to regard Europe merely as a good dumping ground in times of overproduction at home. One of the largest houses of this district told me that they had actually gone to the expense of sending a representative to the United States in order to induce our manufacturers to send their goods to this country. If the initiative has to be taken by the customers themselves, it shows a lack of interest on the part of our manufacturers and dealers.

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*See CONSULAR REPORTS No. 210 (March, 1898), p. 450.

In order to promote American interests in Germany, I would suggest that a number of our manufacturers whose interests do not clash, and who manufacture the various kinds of leather required in the German markets, combine to establish a general agency in this locality, which is the center of the German leather industry, and consign full lines of their goods in bond to this city, as a convenient point for distribution, so that orders can be filled promptly. I have the assurance of local dealers that a large and profitable business can be done. One of the local houses has expressed its willingness to enter into negotiations looking toward the establishment of such a general agency on a large scale, with headquarters in this city and agents throughout the country.

So much for the leather industry in general. The following particulars may prove of interest to some of our manufacturers:

The class, finish, and quality of upper leather principally used by shoe manufacturers in this district, are: Calf, brown and black, glazed and chagrin; patent leather (kid), chevreaux, horse leather, colored calf, colored buskskin, and colored goat.

In calf, the good medium qualities are the most desirable at 70 to 90 marks ($16.66 to $21.42) per dozen; in goat, at 40 to 55 marks ($9.52 to $13.09) per dozen; and in buckskin, at 30 to 40 marks ($7.14 to $9.52) per dozen.

Besides the leather manufactured here, the following countries supply most of the upper leather used in Germany:

France.—Chevreaux, calf, and colored lining sheepskin.

United States.—Colored calf, chrome calf, and chrome chevreaux.

Italy.—Lining sheepskin.

Of the total amount of leather used, about 10 to 15 per cent is colored. The demand in colors is mostly for brown, and, for this year, especially for the lighter shades of brown, and to some extent for green.

The leather industry is one of the most important in this city, no less than ten large manufacturing houses being located here. These manufacture colored calf, goat and buck, fine calf, chevreaux and patent leather; none of which, however, can surpass or even equal the American product. As far as I have been able to ascertain, no American manufacturers of upper leather are represented in this locality.

By the wholesale dealers and boot and shoe manufacturers, American leather is greatly preferred to that of any other make; especially the American colored calf, chrome calf, and chrome chevreaux.

The terms on which dealers and shoe manufacturers buy leather from foreign houses are usually as follows: First-class houses buy for cash with 3 per cent discount; other houses take three months' time and even then deduct 2 per cent; while still others take four or five months' time, and after two or three months give paper.

This is the situation to-day of the leather industry of this section, and the above facts may possibly have a stimulating effect on our manufacturers and exporters. It is certainly a pity to see an open market for our product neglected as it has been in the past.

WALTER SCHUMANN,
MAINZ, *March 4, 1898.* *Consul.*

ARTIFICIAL MARBLE IN SICILY.

Having been requested to give information,* in addition to that printed in CONSULAR REPORTS No. 206 (November, 1897), concerning the manufacture of artificial black marble, its practical uses, etc., I have made further inquiry and submit the following:

The process is not made known by the proprietors, but I have learned that asphalt (which, I stated in my former report, was mixed with tar) is no longer used; it seems that the soft white sandstone, after having been sawed and cut into the desired forms and smoothed, is only boiled in coal tar.

It has happened that large stones have burst during the boiling process, either from too great heat or on account of having been carelessly and improperly placed upon the iron rails or grating in the bottom of the tanks. Now, a layer of the black tiles (described in the report before mentioned) is first placed upon the rails, in order to furnish an even foundation for the stones to rest upon and keep them from moving up and down during the boiling process, and also to protect the lower ones immediately above the fire from being overheated at the start.

I have seen lying in the factory yard a number of large blocks of this black stone which had broken in two during the boiling. They are as hard as granite, and, in this state, difficult to work; therefore, the stones are always cut into the proper forms before being put into the boiling tanks. I noticed that the black had thoroughly penetrated, and that the broken surfaces glistened like coal.

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* A copy of the report has been transmitted to the parties desiring the information.

The coal tar is not put in hot; it is gradually heated up to 700°, controlled by a pyrometer near the furnace. The black liquid penetrates to 20 centimeters (nearly 8 inches) from all sides. When blocks are too large, they are made hollow in the center.

The oil which accumulates on top of the tar is drawn off during the boiling process by means of a tube leading into a recipient; it is afterwards distilled and produces naphthalene.

The use here of artificial black marble is, as yet, not very extensive, it being a new product, and anything new not being easily introduced; besides, the immense lava beds furnish cheap and good stone for many purposes, and white marble from Carrara (upper Italy) is used largely.

However, there has been one beautiful monument erected in the cemetery at Catania. It is 5.71 meters (18 feet) in height, and is made of the artificial black stone, inlaid with pieces of light marble. The effect is admirable. Only the outside and the pinnacle are of marble; the inner part consists of masonry of common lava stones. The difference in cost, as compared with a white marble monument of the same design and dimensions, is great. This structure has cost 1,310 lire (about $242*). One of solid white or Carrara mable would cost 7,000 lire (about $1,295).

The manufacturers have recently completed a beautiful chapel, or family mausoleum, about 40 feet in height in the cemetery of Girgenti, Sicily, which has received the highest praise in the press. It is mostly of this black stone, ornamented and inlaid with white and colored marble.

As to resistance to heat, cold, rain, and the action of the elements in general, the manufacturers claim that their product is fully equal to the real marble, and can be used for any exterior building work.

One of the great advantages, besides the difference in cost, is that the sandstone is soft, and much more easily worked into the desired forms than marble. All the work is done before the stone undergoes the boiling process, excepting the final polishing after the pieces are cooled.

I have been shown beautiful pedestals, columns, garden tables, mantelpieces, washstands, urinals, and flooring, inlaid with borders or centerpieces of colored marble.

For flooring in certain places, and also for slabs for anatomical tables, it is specially recommended, being considered to have disinfectant properties.

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* Calculating the paper lira at 18½ cents.

I have not been able to obtain a fixed price list, charges depending upon style of work, dimensions, etc., and these, if given, could not possibly be a guide for American manufacturers, considering that wages are so much lower here—probably not more than one-fifth of the amount paid American workmen in this line.

LOUIS H. BRÜHL,
CATANIA, *February 21, 1898.* *Consul.*

WINE PRODUCTION OF FRANCE.

I have the honor to submit to the Department, as being of importance to the wine-growing interests of the United States, a synopsis of the recent official report of the commissioners of indirect taxes on the wine product of the year 1897.

It will be seen from the subjoined tables that the average yield was 180 gallons per acre, which is about one-third less than in 1896. The total yield was about equal to the average for the ten years before 1896, but less than the product of that year. The value of last year's vintage is estimated at $132,000,000, about $10,500,000 of which is for the high brands. The total acreage planted decreased during the past twelve months nearly 100,000 acres. It is now some 600,000 acres less than it was ten years ago. The following table shows the yield in twenty departments, the first column referring to 1875, when more wine was produced than in any one year before or since:

Department.	1875.	1895.	1896.	1897.
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*
Hérault	211,500,000	91,980,900	171,518,805	227,200,110
Aude	85,520,000	49,306,915	81,251,055	90,638,370
Gard	25,780,000	24,939,980	38,667,285	61,629,345
Pyrénées-Orientales	32,670,000	44,664,070	45,856,755	45,856,755
Gironde	118,510,000	47,134,620	75,477,420	30,066,210
Bouches-du-Rhône	4,150,000	13,395,820	20,576,790	27,019,845
Var	19,620,000	12,345,435	18,109,215	19,684,420
Rhône	920,000	15,673,610	44,263,755	18,421,965
Loire-Inférieure	67,268,000	26,460,000	29,250,000	15,187,500
Puy-de-Dôme	29,250,000	27,090,360	29,031,670	11,887,920
Haute Garonne	42,830,000	5,400,000	12,340,000	11,497,500
Vaucluse	17,500,000	6,312,020	8,325,000	11,269,440
Isère	16,420,000	8,415,000	10,080,100	10,739,430
Meurthe-et-Moselle	33,887,000	8,257,500	19,249,335	8,255,565
Côte-d'Or	46,993,000	8,719,615	18,964,635	7,856,080
Saône-et-Loire	49,970,000	11,178,540	34,427,115	7,697,955
Marne	44,426,000	8,942,480	15,752,700	6,510,015
Tarn	11,700,000	2,714,000	6,100,000	6,389,955
Lot-et-Garonne	12,400,000	8,200,000	11,720,000	6,159,150
Ain	1,700,000	4,315,000	9,100,000	5,841,540
Total	873,014,000	325,445,865	600,031,635	629,709,070

The total yield in all departments was 727,791,245 gallons; total acreage, 4,222,325 acres.

All of this product, except about $10,500,000 worth, is common wine, drunk by the people, bought in the vineyards or their immediate vicinity. The use of wine at the table is deemed as necessary as bread. It is brought within the reach of the most limited purse and daily consumed by large and small families. For my man-of-all-work and his wife, five children, and mother-in-law, one case of wine is purchased every three and a half months. It contains about 215 quarts and costs, at the dealers near the vineyard, 70 francs ($13.50); the tariff demanded at the city gates being 28.10 francs ($5.40). In many families the consumption per day is about 1 quart for each grown person.

The Moniteur Vinicole stated some weeks ago that the quantity of wine made from alcohol in 1897 was 37,684,760 gallons. The wine from dried grapes (raisins secs) was estimated at 23,458,560 gallons. The alcohol product is formed in this manner: After all the wine has passed from the grapes, the residue is left in the vat a few days, when a quantity of sugar and water is added. Alcohol is thus generated, and a variety of wine called "piquette," or "la seconde cuvée," is made, which is sold as one of the varieties of vin ordinaire.

The wine from raisins is manufactured from grapes imported from Algeria, Tunis, Corinth, and (a small quantity) from Spain. The aggregate importations for 1897 were 42,000,000 pounds. The Government has recently increased the duty on dried grapes and upon wine produced from them, according to the degree of alcohol contained therein.

La Revue Vinicole of December 25, 1897, announced that the phylloxera had made its appearance in the vineyards of Corinth, that it had long been at work in the Levant, and that it had already destroyed the vines on some 150,000 acres in Smyrna. These plants of Corinth prosper in Algeria, and that colony is looked to as a source to supply the failure in the Levant.

Of the total quantity of wine produced in France, nearly one-third comes from the department of the Hérault; and this, with the three adjoining departments—the Aude, the Pyrénées-Orientales, and the Gard—produces nearly five-eighths of the whole. The report shows a notable decrease in the yield throughout the Burgundy vineyards; the departments of the Yonne, the Haute-Saône, the Saône-et-Loire, and the Côte-d'Or having produced only about a third of the 80,000,000 gallons which they yielded in 1896. The district known as the Charente yielded barely 7,000,000 gallons last year, against 300,000,000 before the incursions of the phylloxera. The most flourishing vineyards in the country seem to be in the district from which I write—the valley of the Rhone—where the grape grows in abundance and a good, healthful article is afforded to the working classes at 9 and 10 cents per quart.

The imports and exports for the last ten years are:

Year.	Area in vineyard.	Yield.	Imports.	Exports.
	Acres.	*Gallons.*	*Gallons.*	*Gallons.*
1887	4,860,000	546,797,000	260,595,000	53,758,000
1888	4,606,000	677,296,000	276,210,000	54,045,000
1889	4,544,000	522,800,000	236,578,000	46,735,000
1890	4,541,000	616,860,000	243,675,000	46,645,000
1891	4,406,435	679,115,000	243,630,000	42,078,000
1892	4,452,280	664,348,000	193,500,000	41,512,000
1893	4,483,245	1,125,000,000	113,013,000	36,200,000
1894	4,417,000	878,688,180	101,070,000	38,724,500
1895	4,367,505	600,470,415	143,010,000	38,160,000
1896	4,321,080	1,004,763,420	198,405,000	40,117,500
1897	4,222,325	727,791,245	131,332,500	33,480,000

The imports and exports for 1897 cover only the first ten months.

Something over half of the wine imported came from Spain; next in order are Algeria and Tunis. The destination of the exportations are recorded only as regards champagnes and Mousseux wines, which I append in the order of their importance: England, Belgium, Germany, Russia, and the United States.

The average production of wine for 1897 in seven countries in Europe is stated in the Moniteur Vinicole as follows:

Country.	Production in 1897.	Country.	Production in 1897.
	Gallons.		*Gallons.*
France	727,791,245	**Germany**	47,250,000
Italy	485,390,000	**Turkey**	40,500,000
Spain	447,750,000	**Switzerland**	28,125,000
Rumania	72,500,000	**Greece**	27,000,000
Austria-Hungary	62,500,000	**Bulgaria**	24,525,000
Russia	56,250,000	**Servia**	20,250,000
Portugal	56,250,000		

The decrease in the wine acreage of this country is attributable almost entirely to the phylloxera, which has undoubtedly cost the French people several times more than the war indemnity paid to Prussia.

American vines—the Noah, Othello, Herbmont, and others—upon which French vines are grafted, are growing in hundreds of vineyards and producing grapes from which excellent wines are made. The products of some of these vines are mixed with grapes from vines a hundred years or more old, with satisfactory results. Considerable wine is produced direct from the American vines and is known as American wine. The influence of the soil and climate is said to have caused the product of the transplanted vine to compare favorably with the native. It is calculated that the imported vine, after a naturalization of ten years, will, with the aid of grafting, yield a quality of wine equal to the best in the locality to which it has been transplanted; but the costliest wines come from vines that date from a century to a century and a half or more.

JOHN C. COVERT,
LYONS, *February 14, 1898.* *Consul.*

RUSSIA AS A MARKET.

The Swiss merchants and manufacturers recognize the fact that Russia is an excellent land in which to sell at good prices all kinds of manufactured articles, and they are just now exercising commendable activity in an effort to secure their share of the Russian trade. To accomplish this work, they have one mighty barrier to break down, as have all other nations competing for the markets of the great northern Empire, and that is, the German commercial bulwarks which already surround the Russian trade centers.

Germany has geographical advantages in commerce with Russia. Transportation by water is easy and ample, and the two countries touch for several hundred miles. Another important advantage is the fact that many Russian merchants speak the German language, and those who do not are appealed to by German agents who speak Russian. Germany is doing in Russia what she is doing in Switzerland. She is quartering squads of commercial agents in the trade centers, so well armed and equipped with energy and tact that they capture and hold the fields. In spite of the fact that a strong friendly feeling exists for France, and that French productions are popular in Switzerland, the Germans outsold the French two to one in this country last year. In Russia, also, in spite of the high tariff, the Germans have reached the trade centers with their wares and sell them in increasing quantities. Switzerland is awakening to the fact that Germany's example in this respect is worthy of emulation, and this has already resulted in an increase of Swiss sales in the Russian markets.

Russia offers an excellent market for agricultural implements, hardware, earthenware, cheap glassware, and machines of all kinds. Switzerland marketed in Russia last year over $1,000,000 worth of machinery; and, while the Alpine Republic takes over $11,000,000 worth of goods from Russia (largely breadstuffs) every year and sends her only about $5,000,000 worth in return, still the commercial world of Switzerland is deeply impressed with the advantages of the Russian markets.

The news has received wide circulation in the press of this country that a commercial company has been organized in New York, to be called the Russian-American Trading Company. Its capital is reported to be $5,000,000, and it intends to establish large sample rooms in St. Petersburg, Moscow, Odessa, Riga, Warsaw, Astrakhan, in European Russia; and Vladivostock, Omsk, and Tomsk, in Siberian Russia. It is claimed by the trade journals, which are discussing the matter with some warmth, that the chief aim of this great company will be to control the Russian markets for machinery of all kinds and to secure concessions for the construction and operation of tramways, electric lighting, and similar enterprises. Some of these journals even go so far as to intimate that the Russian Government looks upon this movement with a friendly eye and will give the company a warm welcome, as she prefers to have American capital invested in her domain rather than that of any European country, and especially that of Germany.

JAMES T. DUBOIS,
Consul-General.

ST. GALL, *February 28, 1898.*

RUSSIAN PETROLEUM TRADE IN 1897.

The statistics annexed will give a very fair idea of the progress made by the Russian petroleum business in the past year, showing that it was an active one for the trade; owing, however, to the low prices for refined which ruled during the whole period, and especially the last half, the financial results were undoubtedly much less satisfactory than in 1896.

If the price of refined was unsatisfactory, the trade was in a great measure compensated by the very good prices for residuum and crude, which continued steady and high throughout the year, advancing after the closing of Volga navigation, an almost unprecedented occurrence, as residuum bought after the close of navigation is held for the next season's navigation, a period of usually five months; and, notwithstanding the heavy crude production and the fact that during the winter months the greatest outlet for petroleum products is practically closed, the prices of both residuum and crude in December were the highest of the year.

CRUDE PETROLEUM.

It is difficult, if not impossible, to ascertain the average cost of producing oil at Baku; but the highest estimate I have heard was 4 copecks per pood (17 cents per barrel of 42 gallons), and I believe that that cost is rarely exceeded, while many producers who are fortunate in getting large-flowing wells can undoubtedly produce oil at a much lower figure. These producers must have had a very profitable year, as the price up to the close of navigation was never less than 7½ copecks per pood (about 32 cents per barrel), and the last month in the year it reached about 42 cents per barrel.

RESIDUUM.

The remarkable increase in the demand for residuum for fuel in Russia, and the consequent high prices which ruled throughout the year for that product, coupled with the low price of illuminating oil, resulted in making fuel oil the main object of the refining and relegated refined to second place. The average price of residuum in 1897 was the highest ever known in the trade, notwithstanding the production of residuum exceeded that of any previous year by about 25 per cent. I am not able to give the average price of the year accurately at present; but it was never for any length of time below 34 cents per barrel and was often higher, closing with the year at over 40 cents per barrel. The increase in the demand was due principally to increased distributing facilities in the manufacturing districts of Russia, but there is no doubt that it was also partly due to an increase in the manufacturing industries of the Empire. It is not many years since it was the opinion of some of those engaged in the fuel-oil trade, and therefore most competent to judge, that the price of residuum at Baku could not go above 6 copecks per pood (25 cents per barrel) without curtailing the demand; but either they were wrong or the manufacturing industries of Russia have increased more rapidly than was anticipated, for in 1897, with the average price at least 10 cents per barrel above that figure, the demand increased 25 per cent, and an expression of opinion regarding the future at this time would be very hazardous. At present, three or four weeks before shipments via Volga can commence, because of navigation being closed by ice, residuum is selling at about 42 cents per barrel; and there seems to be no fear on the part of buyers that prices will not be maintained, notwithstanding the present immense crude production—nearly 200,000 barrels per day, or about 60,000 barrels per day more than the average for 1897.

ILLUMINATING OIL.

Prices of refined oil were very low at the close of 1896, but not so low as to make export entirely unprofitable. They continued declining throughout the year, however, and by midsummer were below the actual cost of the oil, based upon prices quoted for crude and residuum; but the high price of residuum and the fact that probably 70 per cent of the refined was produced by refiners who had their own crude prevented any great falling off in export.

To explain the influence of the combination of crude producing and refining, I give the following customary method of calculating the cost of refined, based upon 3½ poods of crude being necessary for the production of 1 pood of refined and 2 poods of residuum:

	Copecks.[*]	Cents.
3.5 poods (126.4 pounds) crude at 7½ copecks (3¾ cents) per pood (36.112 pounds)	26.25=	13.12
Plus cost of labor, chemicals, etc	4 =	2
	30.25=	15.12
Less value of 2 poods (72 pounds) residuum at 8 copecks (4 cents)	16 =	8
Cost of 1 pood (36.112 pounds) refined	14.25=	7.12

which is equivalent to about 1½ cents per gallon, while the average price realized the last half of the year was certainly not more than 12 copecks per pood (6 cents per 36.112 pounds), and probably even less. But, as probably 70 per cent of the refined exported was manufactured by refiners who had their own production, the market price of crude played no very important rôle in the export, as the cost of producing crude oil, as before stated, is rarely greater than 4 copecks per pood (2 cents per 36.112 pounds), while I believe it averages even lower; however, taking 4 copecks as a basis of cost of crude to the refiner who has his own production, the following may be given as the cost of refined oil to such refiners:

	Copecks.	
3.5 poods (126.4 pounds) crude at 4 copecks per pood (2 cents per 36.112 pounds)	14=	$0.07
Labor, chemicals, etc	4=	.02
	18=	.09
Less 2 poods (72 pounds) residuum at 8 copecks per pood (4 cents per 36.112 pounds)	16=	.08
Cost of a pood refined	2=	.01

Consequently, I believe that there was little or no loss in the export of refined; and, as some refiners had more crude than they could use, which cost them much less than 4 copecks per pood, because of wells flowing largely, the average result was even better than shown above.

Of course, the high price of crude and low price of refined made it out of the question for many refiners to do business; and, while much more than half the total refining capacity was worked during the year, I believe at least half of the refineries were shut down.

REFINERS' COMBINATION.

The combination of refiners which was organized in April, 1895, and was known as the "Union," was dissolved in October last year. The agreement was for two and a half years, to be extended two and a half years more with the consent of all concerned; but, as practically all of those interested (except those instrumental in organizing the union, who had great advantages over the majority) declined to renew their agreement, the union passed out of existence on October 13.

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[*] A copeck is worth about half a cent.

The first year of this combination was very profitable; not, however, because of the trade being unified (that not being the case, as 20 to 25 per cent declined to go into the combination), but because of the remarkable advance of refined prices in the United States. There is little doubt, however, that the rank and file of the Baku refiners were led to believe that the advance in prices was wholly due to the existence of the union, and that that organization was in a position, or would soon be in a position, to dominate prices throughout the world by coming to terms with the American trade. But the promised agreement with the Americans did not materialize, and prices at Baku and Batum had to follow American prices down the scale, as they had followed them up; and by the end of 1896 the decline was considerable and still continued, and the trade commenced to realize that someone had made a mistake. With declining prices came disagreements among the agents of the union and their representatives in Europe, as this combination did not have a single head, but had three selling agents who had representatives in the different European markets, and who could not sell a gallon of refined without the permission of a committee of fourteen which met semiweekly at Baku and usually took three or four weeks to deliberate over the selling of one cargo. With an advancing market, as in 1895, this deliberation proved profitable, as the greater delay the higher the price; but with declining prices it worked quite differently, for by the time the committee had made up its mind to sell, the buyer had either withdrawn or dropped his bid. Under the circumstances, it was not surprising that the business fell off, especially as during the summer so many members of the committee were away that it was always difficult and sometimes impossible to obtain a quorum.

It may be realized that this sort of business was profitable to those who were not in the union, but were its competitors, as they (principally case exporters at Batum) managed to sell a great deal of case oil, forestalling the union; and, as they bought their refined upon the basis of sales, they undoubtedly reaped a fine harvest, even on the declining market.

As the state of affairs was gradually realized by the smaller refiners in the union, who had no other interest than to profitably dispose of their goods and no reputation to sustain in the world's markets, the dissolution of the union was not surprising. At present, there seems absolutely no prospect of the trade coming to any agreement. I believe that it is the opinion of a majority of the refiners that combination is useless; which, however, was certainly not clearly demonstrated by the attempt of which I have been writing, as that failure was due entirely to mismanagement.

RAILROAD FREIGHT RATES.

The export of refined oil was apprently so unprofitable that the usual childish cry to the Government for assistance was sent up early in 1897 in the shape of petitions for a reduction of railway freights to Batum; but, as that plan had been tried once by reducing the freight on refined for export from 19 copecks per pood (about 2 cents per gallon) to 9 copecks per pood (about nine-tenths of a cent per gallon) and had signally failed in accomplishing its object (which was to drive American oil out of the foreign markets, but which resulted only in further loss to exporters because of the reduction being met promptly by the Americans, and in a big loss of revenue by the railroad, said to have amounted to about $4,000,000 before the old rate was restored), it seemed very improbable that the Government would again try that method. However, in November the trade was notified that the freight rate would be reduced to 12 copecks per pood on refined oil for export, commencing December 15; and that rate, which is equivalent to about 1¼ cents per gallon, has been in force since that date, but apparently has not resulted in materially increasing exports. That it will increase the profits of the refiner who exports refined made from crude which he produces himself can not be doubted; but that it will help the refiner who buys his crude is not at all apparent, for present prices abroad are too low to justify refiners paying 9 to 10 copecks per pood (4½ to 5 cents per 36.112 pounds) for crude. The refiner who produces his own crude—and I find that the statistics of 1897 show that 65 to 70 per cent of the total crude was produced by refiners—can now undersell all others in the foreign markets without the least sacrifice, as, upon a basis of 4 copecks per pood (2 cents per 36.112 pounds) as cost, with the existing price of residuum and the reduced freight rate, such refiners can, without loss, sell refined oil at from 1.6 to 1.8 cents per gallon free on board Batum (equivalent to about half a cent per gallon at Baku), which is more than a cent per gallon lower than the prices of the last year.

PRODUCTION OF CRUDE OIL.

The average daily production in 1897—about 139,000 barrels—was the largest in the history of the trade; but, as the production from flowing wells was only a few hundred barrels per day more than in 1896, the bulk of the increase was from pumping wells, which increased in number about 100 during the year, or, rather, the number of wells producing in 1897 was more than 100 greater than in 1896, so that the average production per well was less than in 1896.

The great increase in the volume of operations shown by statistics annexed must, however, result in a still further increase in the production this year, unless the territory shows more pronounced signs of exhaustion than have yet been apparent. It seems to be the opinion of many that the territory will be extended northward, as several pretty fair wells have been obtained some distance north of the main body of the territory; notwithstanding the field was supposed to be well defined upon that side some years ago by several wells which were drilled to the depth thought necessary at that time without satisfactory results. At present, it is too early to say that these new wells have opened up a large body of territory or that they will prove an extension of the territory northward, but they may do both, and there seems no probability of anything but an increase in the production this year.

SEEKING NEW TERRITORY.

So far, all efforts to find new fields in the vicinity of Baku have been unsuccessful. At Hidar-Zinda, about 50 miles north of Baku, on the shore of the Caspian, three wells were started in 1896, having been located upon surface indications, which were remarkably good; at the end of 1897 these wells had all been drilled deeper than 1,000 feet, without finding oil in paying quantities, and, although they are not yet abandoned, I think no one expects any good results from them. Still farther north, between Derbent and Petrovsk, other wells have been drilled, and, while a good prospect of oil was found at shallow depth, deeper drilling proved them practically failures. South of Baku, about 15 miles from Poota, a well was drilled more than a year ago, but was then stopped; recently, drilling has been recommenced upon this well, and, when I last heard from it, they were nearly 1,200 feet deep, with no oil. Almost every week the Tiflis newspapers report test drilling at some place or other in the Caucasus; but, as they never report any successes from such drilling, I presume it is always a failure.

FOREIGN CAPITAL.

During the past year, several very important sales of Baku producing property have been made, and it is no exaggeration to say that at the present time more than half the total production is offered for sale or is covered by options at prices which would frighten an American producer. Of course, the market is London, and the buyers so far have been people with no experience in the business whatever; but, as they have floated companies with a capital usually about three times the amount paid, it is safe to say that they have lost nothing. These English companies have so far invested about

$3,500,000 in producing property, notwithstanding they are compelled to hold all the property they buy in the name of Russian subjects, as a ukase of 1892 makes it impossible for a foreigner or Jew to hold oil property in the Caucasus without the permission of the governor-general of the Caucasus and two of the cabinet ministers for each piece of land leased or bought. It seems that these formalities are not so easily met, as up to the present none of the foreigners have obtained the right to hold property, and all the investments are held in the name of Russian subjects. If the stockholders of these companies have any better guaranty for their title to the property than the honesty of the Russian in whose name the property stands, it is not apparent to the public.

Of course, the advent of foreign capital has caused a remarkable advance in the prices asked for wells and territory. An idea of this advance will be obtained from the fact that one man who holds about 2.7 acres in fee simple and about three times as much leased at 2.5 copecks per pood (1¾ per 36.112 pounds) royalty, upon which there are 7 wells producing less than 500 barrels per day and 1 drilling well, asks about $415,000 for the property, while early in the year his price was only about $100,000. I am informed that he is likely to get his price.

From an American standpoint, such prices are riduculous, as is also the price fixed upon the Government land remaining unleased in the field by a commission appointed for that purpose. This commission, after due deliberation and examination, fixed the price at about $13,000 per acre. But at Baku any price seems cheap at times, as is instanced by one of the recent purchases by foreigners. This purchase consists of about 27 acres, upon which more than 30 wells had been drilled in the past fifteen years and over 24,000,000 barrels of oil taken out from shallow depth. Many of the wells were abandoned, and the drilling at present is at about 1,400 to 1,500 feet, making the cost of a well not less than $25,000. The price paid for this property, including some tankage in Russia, steamers, and an old refinery which had to be dismantled, was about $2,600,000; and, as the other property mentioned was worth some $600,000, the price for the 27 acres and 5 or 6 wells was about $2,000,000. This seemed an outrageous price until, a few weeks ago, a flowing well was struck, which commenced producing at the rate of probably 100,000 barrels per day, and now, four or five weeks later, is still doing 70,000 or 80,000 barrels per day. As crude is worth 40 to 45 cents per barrel, it will not take a great while for this well to pay out the original investment; but, as the property was floated in a company with a capital of about $6,000,000, it is not at all certain that the common-stock holders will greatly benefit by this great good luck.

BAKU—BATUM PIPE LINE.

In the report from this consulate upon the petroleum trade of 1896,* it was stated that an appropriation had been made by the Government for the construction of a pipe line (8-inch) for refined oil from Batum to Michailova, a station on the railway about 145 miles east of Batum and 415 miles west of Baku, and that it was expected that this line would be ready for work by September, 1897. Early last year the papers stated that a further appropriation had been made to carry the line about 20 miles beyond Tiflis, and that it was intended to eventually carry it through to Baku by building sections each year. In June last, the contract for the tankage for the first 145 miles was awarded, with the provision that the work must be completed by September. Up to the beginning of this year, however, the construction of the line had not been commenced, the delay being undoubtedly due to the difficulties encountered by the Russian-American company who had the contract for about 125 miles of the pipe. This company commenced erecting very large iron works at Mariopol, on the Sea of Azof, several years ago, and, upon getting the contract, it imported from the United States a complete pipe mill, with twenty-five or thirty skilled workmen, and commenced making pipe as early as February last year, but up to August had not succeeded in making much pipe which was accepted by the Russian inspectors. Tiflis newspapers stated recently that the construction of the line was progressing rapidly, and that it was expected that it would be transporting oil by the end of the summer; so I presume the Mariopol works have finally succeeded in making acceptable pipe. Still, I believe it is perfectly safe to leave this pipe line out of calculations for the current year.

GROSNI.

This comparatively new field does not seem to fulfill the expectations of the trade (which were undoubtedly justified by the large wells with which it was opened), notwithstanding the considerable amount of work done last year, which is shown by the following figures:

Description.	December 31—	
	1896.	1897.
Wells producing ....number...	12	12
Daily production ....barrels...	10,000	13,000
Wells idle ....number...	3	7
Wells drilling ....do........	6	24
Wells drilling deeper ....do........	1	3
New derricks ....do........	5	6

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* See CONSULAR REPORTS No. 201 (June, 1897), p. 185.

Several of the older wells continue producing largely; but the result of the new work can hardly be satisfactory, as the increase in production is insignificant when the amount of work done is considered. In the first wells drilled in this field, oil was found at 440 feet and even less; and, while the above figures do not show that many wells were completed in 1897, I find that of the 24 wells drilling at the end of the year, 18 were deeper than 500 feet, 10 were deeper than 600 feet, 7 deeper than 700 feet, and 5 were over 900 feet. From this, I infer that the shallower strata are exhausted, and the existence of deeper strata is problematical and only to be ascertained by the drill.

As there are two modern refineries at Grosni, both erected especially for the working of Grosni crude (one of which has been running since 1896, although not steadily), I believe it has been pretty clearly demonstrated that Grosni is not at present an important factor in the refined-oil trade. I am reliably informed that, while the crude is not much heavier than the average Baku crude when fresh, it grows heavier rapidly when exposed to the air, and that it is not possible to take more than 8 to 10 per cent illuminating distillate from it without leaving a residuum which is very inferior for fuel purposes, not being able to compete with Baku residuum. From this and the fact that, as far as I have been able to ascertain, the refinery at Grosni has not turned out more than one small cargo of refined for export, I am led to infer that the crude is now being used in its natural state for fuel, and that refining has been practically abandoned.

I annex statistics of production, drilling, and output from Baku and shipments from Batum for 1897 in comparison with those for 1896.

Number of wells producing.

Month.	Balakhani-Sabunchi.		Romani.		Bibi-Eibat.		Total.	
	1896.	1897.	1896.	1897.	1896.	1897.	1896.	1897.
January	425	502	51	72	25	25	501	599
February	430	500	52	73	26	25	508	598
March	430	516	55	73	26	25	511	614
April	453	527	59	75	24	24	536	626
May	456	540	57	78	27	25	540	643
June	474	554	56	81	17	23	547	658
July	477	561	65	78	24	29	566	668
August	483	567	68	83	24	27	575	677
September	499	589	72	79	26	20	597	688
October	510	601	70	82	26	30	606	713
November	516	591	72	78	26	28	614	697
December	519	599	75	77	26	26	620	702
Average for year							560	657

Number of flowing wells.

Month.	Balakhani-Sabunchi.		Romani.		Bibi-Eibat.		Total.	
	1896.	1897.	1896.	1897.	1896.	1897.	1896.	1897.
January	2	2	4	5	1	2	9	9
February	2	4	6	5	2	4	10	13
March	3	2	5	5	3	4	11	11
April	1	1	5	5	2	1	8	7
May	1	3	5	2	2	3	8	8
June	....	2	4	1	2	4	6	7
July	....	2	5	....	2	4	7	6
August	2	3	4	1	3	2	9	6
September	....	2	3	4	3	2	6	8
October	2	1	3	3	3	4	8	8
November	4	3	1	3	3	3	8	9
December	4	1	5	1	2	3	11	5
Average for year	....	....	....	....	....	....	8	9

Number of wells started drilling.

Month.	Balakhani-Sabunchi.		Romani.		Bibi-Eibat.		Total.	
	1896.	1897.	1896.	1897.	1896.	1897.	1896.	1897.
January	10	18	2	5	1	1	13	24
February	5	7	....	....	2	1	7	8
March	10	19	5	3	1	....	16	22
April	11	13	4	6	1	....	16	19
May	7	28	2	3	1	....	10	31
June	11	34	4	....	1	....	16	34
July	6	27	4	....	2	2	12	29
August	10	37	1	1	1	....	12	38
September	21	28	4	2	2	....	27	30
October	29	25	6	1	1	....	36	26
November	17	17	1	3	3	1	21	21
December	22	19	1	2	1	....	24	21
Total	159	272	34	26	17	5	210	303

Wells completed, with depth and average daily production for month.

Month.	Balakhani-Sabunchi					
	1896.			1897.		
	Wells.	Average depth.	Average product.	Wells.	Average depth.	Average product.
		Feet.	*Barrels.*		*Feet.*	*Barrels.*
January	10	795	636	11	825	2,401
February	6	700	245	9	806	226
March	4	713	315	11	1,115	372
April	7	666	386	15	936	401
May	4	706	1,592	23	747	411
June	12	919	516	19	747	238
July	9	845	360	17	784	338
August	7	1,008	2,033	14	865	310
September	14	911	370	10	830	306
October	13	759	764	15	825	251
November	8	1,102	601	15	780	276
December	9	805	226	16	657	273
Total	103	843	619	175	815	451

Month.	Romani.					
	1896.			1897.		
	Wells.	Average depth.	Average product.	Wells.	Average depth.	Average product.
		Feet.	*Barrels.*		*Feet.*	*Barrels.*
January	2	1,141	1,260	2	1,134	265
February	4	1,013	2,238	...	...	...
March	2	1,243	1,013	...	...	...
April	1	1,505	245	3	266	2,759
May	1	749	146	1	1,372	360
June	2	1,358	4,024	4	1,204	420
July	2	1,267	2,372	...	...	...
August	3	854	761	5	1,431	480
September	2	1,362	1,316	2	1,617	598
October	3	1,118	612	4	905	440
November	2	1,421	377	1	1,316	304
December	...	...	...	...	...	...
Total	24	1,112	1,424	22	1,118	750

Wells completed, with depth and average daily production for month—Continued.

Month.	Bibi-Eibat.					
	1896.			1897.		
	Wells.	Average depth.	Average product.	Wells.	Average depth.	Average product.
		Feet.	*Barrels.*		*Feet.*	*Barrels.*
January	1	1,355	17,400	1	1,463	1,192
February	1	1,029	592	2	1,335	460
March	1	735	277	....	....	....
April	....	....	....	....	....	....
May	1	1,225	1,440	1	1,456	1,284
June	....	....	....	2	1,442	32,707
July	....	....	....	1	1,085	1,666
August	....	....	....	1	1,512	6,600
September	....	....	....	....	....	....
October	....	....	....	3	1,670	1,347
November	....	....	....	....	....	....
December	2	1,334	460	1	964	264
Total	6	1,169	3,438	12	1,420	6,282

Month.	Total.					
	1896.			1897.		
	Wells.	Average depth.	Average product.	Wells.	Average depth.	Average product.
		Feet.	*Barrels.*		*Feet.*	*Barrels.*
January	13	891	2,539	14	912	380
February	11	840	1,015	11	898	278
March	7	908	600	11	1,115	372
April	8	769	378	18	816	787
May	6	799	934	25	798	436
June	14	982	960	25	875	1,839
July	11	923	735	18	800	395
August	10	960	1,524	20	1,025	380
September	16	967	536	12	962	367
October	16	826	795	22	955	375
November	10	1,166	575	16	814	276
December	11	897	278	17	675	273
Total	133	906	892	209	880	813

Shipments of petroleum products from Batum in 1896 and 1897.

Country.	Crude and residuum.		Lubricating.		Illuminating distillate.		Refined.		Total.	
	1896.	1897.	1896.	1897.	1896.	1897.	1896.	1897.	1896.	1897.
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*
Austria	428,825	205,190	1,211,975	2,850,120	7,085,480	12,381,270	2,182,770	2,826,530	10,909,050	18,263,110
Belgium	70,515	3,546,595	2,306,855	8,086,275		233,185	4,282,835	1,879,690	6,660,205	13,745,745
Bulgaria and Servia	1,500	700	32,700	58,850			4,486,055	6,939,730	4,520,255	6,999,280
China and Cochin China							11,251,210	19,406,270	11,251,210	19,406,270
Egypt	19,800	6,750	70,700	140,600			8,458,240	11,001,690	8,548,740	11,149,040
United Kingdom	168,355	2,116,810	2,337,375	4,725,945	9,666,955	13,646,660	19,068,125	23,485,345	31,240,810	43,974,760
France	1,346,870	1,637,395	3,705,990	6,699,545	14,785,630	12.855,135	1,291,915	856,270	21,130,405	22,048,345
Germany	443,265	1,236,865	6,132,055	8,518,810	15,000	97,000	1,934,795	7,257,905	8,525,115	17,110,580
Holland				100,000						100,000
India				1,000			38,160,280	34,984,880	38,160,280	34,985,880
Italy	450,650	1,843,840	208,025	559,800			4,953,115	5,862,220	5,611,790	8,265,860
Japan							3,460,540	6,142,140	3,460,540	6,142,140
Java							9,749,700	1,362,250	9,749,700	1,362,250
Manila							1,525,100	1,626,000	1,525,100	1,626,000
Malta							635,495	1,674,415	635,495	1,674,415
Roumania	1,050	4,100	254,900	233,500			311,070	515,740	567,020	753,070
Spain		320,655	5,000	759,445	232,865				237,865	1,080,100
Turkey	41,950	73,450	74,350	130,700			27,881,400	33,336,325	27,997,700	33,540,475
Suez Canal (bulk)							19,208,920	56,402,320	19,208,920	56,402,320
Africa							250,250	1,140,360	250,250	1,140,360
Other countries			5,500	4,500			239,190	511,170	244,690	515,670
Total exports	2,972,780	10,992,350	16,345,425	32,869,090	31,785,930	39,213,250	159,331,005	217,210,980	210,435,140	300,285,670
Russia	377,160	255,470	895,350	1,143,555	15,850	33,700	26,384,096	31,438,865	27,672,456	32,871,590
Total shipments	3,349,940	11,247,820	17,240,775	34,012,645	31,801,780	39,246,950	185,715,101	248,649,845	238,107,596	333,157,260
Increase		7,897,880		16,771,870		7,445,170		62,934,744		95,049,664

NOTE.—Suez Canal bulk shipments were for points beyond the canal, but unknown here. Distillate to United Kingdom was gas oil.

Average daily production of Baku fields in 1896 and 1897.

Month.	Flowing wells.		Pumping wells.		Total.	
	1896.	1897.	1896.	1897.	1896.	1897.
	*Barrels.**	*Barrels.**	*Barrels.**	*Barrels.**	*Barrels.**	*Barrels.**
January	25,711	46,070	88,231	102,350	113,932	148,420
February	35,015	60,621	91,104	97,682	126,119	158,303
March	7,842	25,793	90,696	102,324	98,538	128,117
April	22,824	28,985	95,787	109,556	118,611	138,548
May	27,708	21,670	100,101	108,504	127,809	130,174
June	33,212	31,535	92,106	110,714	125,318	142,249
July	53,892	20,020	97,435	110,016	151,327	130,036
August	45,983	10,509	103,296	113,145	149,279	123,654
September	16,768	18,500	109,346	114,858	126,114	133,358
October	20,024	12,929	101,715	121,873	121,739	134,802
November	19,628	52,700	101,684	118,680	121,312	171,380
December	33,356	21,472	105,250	108,959	139,106	130,431
Total	28,526	28,935	98,266	109,962	126,644	138,897

* Of 42 gallons.

Output of all products from Baku in 1897.

Month.	Illuminating.	Lubricating.	Residuum.	Crude.	Other products.	Total.
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*
January	30,720,000	3,795,000	4,305,000	1,845,000	15,000	40,680,000
February	26,405,000	3,015,000	9,585,000	3,160,000	35,000	42,200,000
March	44,335,000	3,135,000	82,870,000	14,570,000	265,000	145,175,000
April	46,970,000	3,380,000	132,060,000	18,340,000	335,000	201,085,000
May	48,155,000	4,830,000	156,015,000	14,380,000	70,000	223,450,000
June	45,530,000	4,405,000	153,490,000	14,775,000	670,000	218,870,000
July	43,095,000	4,190,000	157,600,000	16,125,000	95,000	221,105,000
August	46,510,000	3,870,000	175,790,000	23,265,000	555,000	249,990,000
September	38,540,000	3,080,000	139,275,000	10,270,000	600,000	191,765,000
October	44,295,000	5,060,000	106,295,000	7,975,000	765,000	164,390,000
November	25,265,000	6,950,000	3,500,000	2,190,000	370,000	38,275,000
December	18,215,000	150,000	6,315,000	3,150,000	2,150,000	29,980,000
Total	458,035,000	45,860,000	1,127,100,000	130,045,000	5,925,000	1,766,965,000
1896	404,800,000	33,740,000	901,825,000	75,165,000	5,315,000	1,420,865,000

Stocks of all products at Baku December 31, 1896 and 1897.

Product.	1896.	1897.
Crude:	*Barrels.*	*Barrels.*
At wells	764,690	592,547
At refineries	2,636,524	1,840,212
Total crude	3,401,214	2,432,759
	Gallons.	*Gallons.*
Illuminating oils	71,785,020	67,274,980
Lubricating oils	6,920,180	9,610,725
Residuum	238,460,315	263,532,270

JAMES C. CHAMBERS,
Consul.

BATUM, *March 7, 1898.*

PETROLEUM IN CHINA.

The bulk of the petroleum trade between Batum and China has hitherto been in the hands of a number of different firms. Since February 1, 1898, the trade has been consolidated into one corporation, known as the Shell Transport and Trading Company, Limited. It has a capital of $9,000,000 in 18,000 shares of $500 each, privately subscribed by the various firms interested in the combination. These firms are the Borneo Company, of the Straits Settlements; Speidel & Co., of Saigon; Ker, Bolton & Co., of the Philippines; Anold, Karberg & Co., of Hongkong and the China ports; M. Samuel & Co., of Japan; Best & Co., of Madras; Graham & Co., of Bremen; A. Rùnge & Co., of London; Lane & MacAndrew, of London; and several other British firms.

Arnhold

This powerful combination possesses huge resources in carrying, storing, and distributing stock, and has a network of stations in all the principal centers in India, the Straits Settlements, China, Hongkong, and Japan. It has also fourteen tank steamers, which are kept constantly employed in carrying oil to the various stations. These tank ships are of 25,000 tons each. In addition, the company possesses 200,000 acres of petroleum-producing land in Borneo. It is also constructing, in Borneo, one of the largest oil refineries in the world, at an expense of £200,000 ($973,300).

In the consular district of Canton, in all the principal cities of the provinces of Kwangtung and Kwangsi, kerosene oil is used by the natives.

American oil dealers can not ignore the competition of Russian and Langkat oil. The Langkat oil is what dealers here call "low grade," but is cheap and popular in China and is already being "pushed" by British and German agents at the newly opened ports on the West River.

Agents of Batum and Dutch oil are also actively pushing the sale of their products in the commercial centers of the densely populated provinces of the Canton district.

Great injury is done to American oil interests by the sale of Dutch and Batum oil packed in American tins and boxes.

A large and constantly growing trade in oil is carried on in these provinces by natives and by British and German agents for Batum and Dutch oil, while our American oil interests are being neglected. The American kerosene companies should have active agents here. There are many millions of consumers in this district, and an enormous trade is being done in oil and other foreign products. At Wuchow, 220 miles west of Canton, Americans now have the right to reside and carry on business with the same freedom they have here in Canton; but no Americans have yet located at Wuchow, and consequently the British and German firms are pushing their inferior brands of oil in this distributing center for the Kwangtung, Kwangsi, Kweichou, and Yunan provinces.

In the year 1896, there were imported to Canton 216,945 gallons of American kerosene, against 8,990 gallons of Russian oil. Last year (1897) the importation of Russian oil greatly increased. This year the prospects are better, since the opening of the West River to foreign trade. Previous to the opening of Wuchow, on the West River (in June, 1897), very little oil reached that city, because it had to be carried by Chinese in native craft, and the owners or dealers were compelled to pay large sums of money at the native or likin tax offices en route. These stations are located at intervals of only a few miles apart, and the several "squeezes," or payments required by the local authorities, made the oil very expensive. As soon as the port was opened, the Imperial Maritime Customs established a branch office there, and foreign products were at once able to reach Wuchow on payment of half duty (2½ per cent), in addition to the regular import rate, 5 per cent, of the Chinese customs.

Action should be taken immediately to protect American interests in Wuchow, and I am sure that any reasonable expenditure incurred in pushing our oil in these markets can not fail to result in lasting benefit. There are more than 400,000,000 people in China to supply with light. They have hitherto depended on the native bean oil and tallow candles, and are quick to appreciate the advantages of kerosene. Every possible effort should be made to hold the trade in this article.

EDWARD BEDLOE,
Consul.

CANTON, *February 14, 1898.*

JAPANESE PETROLEUM PRODUCTION.

I transmit a clipping from the Kobé Chronicle of February 28 (an English journal published at this port) containing a statement of the location and output of the oil wells in Japan, so far as they have been discovered, which seems to refute the extended claims hitherto made as to yield and quality of production.

SAMUEL S. LYON,
Consul.

HIOGO, *March 2, 1898.*

SOME FACTS REGARDING JAPANESE PETROLEUM.

From time to time, references are made in the vernacular journals to the existence of petroleum in the province of Echigo, and we therefore consider it will prove interesting to many of our readers if some account of the extent and value of these deposits be given. For purposes of convenience, we may divide the districts where kerosene is found into four. The first is situated between 5 and 6 miles from the town of Nagaoka, and in this district there are some sixty wells at work, situated on steep hillsides. During 1894 and 1895, the wells were very productive, the outturn being about 30,000 gallons a day. Latest reports, however, show that the production is decreasing, and it does not now exceed 10,000 gallons per day. Pumping has to be maintained continually in these wells, which vary from 600 to 1,500 feet in depth; and in some the flow is so trifling that pumping can only be carried on intermittently. This inadequate flow of oil appears to be a characteristic of most of the Japanese wells. Not far from the wells above mentioned, another petroleum-yielding area was discovered about two years ago. The first wells, sunk to from 400 to 600 feet, gave very good returns even before pumps were fitted; but after a few months the flow slackened, and, though pumping has now been resorted to, the production appears to be rapidly decreasing. In these new wells the quality is fairly good, and in some excellent, the analysis showing 70 to 75 per cent of illuminating petroleum, while the wells first mentioned do not average more than 54 per cent. But the method of refining the oil is very ineffective, the process being carried on in small private stills, and, the product being thus of uneven quality, it is found necessary to mix it with from 40 to 50 per cent of American oil before it can be used for illuminating purposes. A new refinery, however, is in process of construction at Nagaoka, with machinery made in Japan, capable of dealing with from 7,500 to 8,000 gallons of crude oil daily; and it is asserted that the oil in this refinery will be brought up to the American standard. There is also a refinery, with a capacity of 4,000 gallons a day, at Niigata, where a part of the crude oil is effectively treated.

The second district from which oil is obtained is situated at Idzumosaki and Amasemachi in the province of Echigo. The same results have followed the working of the wells in this district as in that first named. When the existence of petroleum was discovered on the seashore, a company was floated and land reclaimed, upon which some fifty or sixty wells were sunk. Before ten years had passed, however, the production showed a great falling off, and not only have many of the wells been abandoned, but the new wells sunk have given very poor returns. It is doubtful if the whole outturn of this district exceeds 5,000 gallons per day. Possibly, if deeper boring were attempted, the results would be improved. The deepest well in this locality is 2,400 feet, and from this the best oil is obtained, the others varying in depth from 400 to 1,800 feet. In quality, indeed, there is great diversity among these wells, some producing only 45 per cent of illuminating oil, while the best reach a limit of 75 per cent, the oil being treated in a good, though small, refinery on the spot. But it seems clear that the district is almost worked out, and the pumping machinery employed is continually being removed to other localities.

The Japan Petroleum Company has control of a district situated from 10 to 12 miles from that first mentioned, where there is an output of not more than 1,500 gallons per day. The product is of an inferior quality, and there are expectations that this district will shortly be abandoned as not worth further development.

Some 40 miles, again, distant from the first district named is to be found a number of wells where, though the flow is superior to all the others mentioned, the quality is exceedingly poor. The outturn is about 25 per cent of illuminating oil, and 40 to 50 per cent of lubricating oil. The latter is difficult to dispose of, as it is sold unrefined, and factories with complicated machinery use only the American product, to avoid the clogging of the wheels that results from employing the Japanese lubricant. Even when employed for lubricating big wheels and rough machinery, the Japanese oil is mixed with American before use. It costs about half the price of the latter product.

It has been stated that the total output of the Echigo fields is from 650,000 to 700,000 cases refined yearly; but, as already pointed out, the production is decreasing. About twelve months ago, two American experts arrived in Japan to prospect the oil fields, about which there was considerable writing at the time in the Japanese journals. They remained in Japan for more than six months and made a close investigation of the yield in the different oil regions; but eventually they returned to America convinced, it is said, that the oil was not sufficiently plentiful to warrant being treated with expensive machinery. However this may be, nothing practical seems to have come of their visit. Presuming that the yield of the Echigo wells is from 650,000 to 700,000 cases, this represents only one-eighth part of the total import of foreign petroleum, which in 1896 amounted to 5,462,000 cases. Thus, taking everything into consideration, it does not seem that there is likely to be much competition between the foreign and the Japanese product, 80 per cent of the latter being consumed by Echigo and the surrounding provinces alone, while the remainder is placed at a disadvantage, owing to difficulty of transport. At the wells the price of crude oil varies from 2.50 yen ($1.25) per koku (about 50 gallons) to 6.15 yen ($3.07), according to quality. The refined article is sold retail in the districts of production at from 2 to 2.05 yen ($1 to $1.02) per case; but when it comes into competition with American, Russian, and Langkat oil at Osaka, it is found necessary to sell the Echigo product at 1.85 to 1.90 yen (92 to 95 cents) per case, notwithstanding that the cost of freight, insurance, and leakage from Niigata, the port of shipment, to Osaka must reach to 15 sen (7 cents) per case at least. Unless, therefore, there are discoveries of oil fields with a much greater output than those of Echigo, it would seem that the foreign product is not likely to be displaced by the Japanese. From information that has reached us, it would seem that American, Langkat, and Baku oil have more to fear from another quarter. We learn that a Franch expert has recently been investigating the oil fields in Saghalien and has made a very favorable report, with the result that a French company is being formed to develop the petroleum fields of this island, which are said to be of very wide extent.

PETROLEUM IN THE DUTCH EAST INDIES.

The following paragraph appeared recently in a New York paper:

> American petroleum has already been practically driven out of the Dutch East Indies by the native product, and the use of the latter is spreading into other Eastern countries.

On seeing the above, I at once sent to the Standard Oil office here to request the figures of importations of American, Russian, and Sumatra oils for 1896 and 1897.

Their reply gives figures as follows:

Imports of oil into Java.

Year.	American.	Russian.	Langkat (Sumatra).	Total.
	*Cases.**	*Cases.**	*Cases.**	*Cases.**
1896	1,678,682	731,951	330,652	2,741,285
1897	2,009,290	495,106	539,569	3,043,965

*Of 10 gallons.

It will be seen that, far from being "practically driven out of the Dutch East Indies," the importation of American oil has increased 330,608 cases in a year; Russian oil has decreased 236,845 cases, and Sumatra oil has increased 208,917 cases. This, despite the fact that the prices of the oils are: American, $1.26 per case; Russian, $1.22 per case; Sumatra, $1.18 per case.

The Russian oil, in spite of underselling American oil, is being driven out of the market. The figures show, undoubtedly, that Sumatra oil is making a larger percentage of increase than American oil; but this is obviously due to the lower price of the local article, which is bought in spite of its inferior quality.

It must also be taken into consideration that a most determined fight is being made against the Standard Oil Company, and that everything is done, officially and commercially, to hinder and annoy it. The Government would like to put a heavier tax on its oil, but hesitates for fear of raising prices and producing popular discontent. There is little doubt, however, that, should the present great increase in the output of Sumatra oil continue, and enough to supply the local market be produced, a high protective, if not actually prohibitive, tax will be imposed. At least, such is the general opinion here. The present tax is not unreasonable, being 10 cents per hectoliter (26.418 gallons) on foreign oils, besides an excise duty on both foreign and Sumatra oils of 80 cents a hectoliter.

The end of this fight is hard to predict; but it is commonly reported that the Standard Oil Company is doing business at a loss, whereas the Sumatra oil companies are supposed to be making money, one of them having last year paid a dividend amounting to 100 per cent.

There is a successful refinery in Java, near Sœrabaya, and it is claimed that Borneo will prove to be a great oil country.

SIDNEY B. EVERETT,
BATAVIA, *February 1, 1898.* *Consul.*

TRADE OPPORTUNITIES IN SIAM.

Siam offers a field for development which is not appreciated by American exporters and manufacturers. During the coming year special effort should be made to increase the trade of the United States with this rich and prosperous Kingdom of southeastern Asia. A critical period is approaching, and the results thereof will determine the control of Siamese foreign trade.

Too little is known about this country in the United States, or, I might say, there is too little respect for it as a factor in Asiatic trade.

True, it is small compared to our vast area and population, but it is deserving of far more attention than it receives. It is of more consequence in the political world at this writing than it has ever been before, and its commerce is growing. Exporters of Europe have fully awakened to the importance and possibilities of Siam's markets.

After a residence of four years in Siam, I think that here is one of the best opportunities for the United States to build up a trade that is afforded anywhere in the world, considering, of course, the population and area. But all efforts. to induce American exporters to enter these markets have been unsuccessful. Letters have come in unlimited numbers, to all of which careful attention has been given; catalogues have arrived and been distributed where they would do the most good; questions asked have been answered in detail; and many reports, general and specific, have been sent to Washington and duly published for the benefit of the exporters and manufacturers of the United States; but still there is a most discouraging lack of interest. This interest should be evidenced by sending to Bangkok experienced and capable representatives to carefully investigate the field, secure trial orders, and establish reliable agencies. In this connection, three facts are worthy of note: First, not more than six qualified representatives of American houses have visited Siam during the past three and a half years; second, almost without exception those that have come have been surprised at the extent and opportunities of the market, and have gone away with satisfactory orders, or, at least, with sufficient to pay expenses; third, in the same period no less than one hundred capable representatives of European firms have visited Bangkok, and, in 90 per cent of the cases, have done very well.

If an American house which deals in the class of goods exported to foreign lands is strong enough to employ one or more traveling agents in the United States, it can afford to send a capable man to the Far East to take charge of the entire field, from Yokohama to Singapore, which would include Bangkok. If he did not pay expenses, and so caused loss to his company, it would either be because he was not qualified by experience and training, or because the class of exports he was endeavoring to market would not be suited to the field. If the products he offered were in demand, his trip should result favorably.

Catalogues are valuable in their way—invaluable, in fact—but too much reliance is placed on them. They do not discuss the matter with the buyer; they do not answer all his inquiries; they do not obviate his objections to trying a new firm, a new class of goods, or to giving up his relations with some European house which has supplied him for years. Most merchants at home have already read this observation, but I will add this comment: If firms which are rich enough to publish the elaborate catalogues, which they issue annually, would devote even a small portion of that expense to sending energetic, educated, and tactful representatives to the Far East, they would obtain far more substantial returns.

One great point about Siam, which has been repeated time and time again in my reports on the opportunities for American trade, I now wish to call to the attention of American merchants for the last time, although it is quite probable that my successor will make the same recommendation. It is, that there is unquestionably an excellent and practicable opening in Bangkok for the establishment of a large, strongly capitalized American importing and exporting firm. The field is here, the business is here, present conditions are favorable, and the outlook for such an investment is good. All the important European houses (of which there are many) which have been well managed have succeeded financially, paid satisfactory dividends to stockholders, and are to-day enlarging rather than curtailing their operations. A United States company would run little or no risk in opening a house in Bangkok, because a retail department could be established which would pay all current expenses of employees, clerk hire, rent, lights, insurance, etc. I seldom discuss American trade opportunities with a foreigner or native whose opinion is reliable, without reference being made to the absence of a representative American importing and exporting house. The consensus of opinion is that, with good executive control, it would pay handsomely. It would be best if a company already permanently established in Japan and China would operate an extensive branch here; but if a new firm were organized in New York or San Francisco with sufficient capital—say $100,000 to $200,000 gold, with only a third or half paid up to begin business—and with a local manager who has had experience in dealing with Asiatics, I am confident that it would not only pay expenses from the start, but a dividend of 10 to 15 per cent at the end of the second year.

Having received some two hundred letters with a great variety of inquiries (all of which have been individually answered), I will now give special data in regard to Siam and her foreign trade, which seem to be desired.

POPULATION, PHYSICAL FEATURES, ETC.

Siam has a population variously estimated from 7,000,000 to 10,000,000, but the true figures are probably about 8,000,000. Its area, which approximates 250,000 square miles, or nearly the size of Texas, could easily support 40,000,000; so that it can be seen at a glance that Siam, although an old country, is young in development.

It is larger than Japan proper or Korea and has far greater wealth and resources than the latter. The physical conformation is remarkable. Not only are there large valleys watered by wide rivers and numberless canals, but fertile uplands, forests of teak and other valuable woods, and rolling hills where gold, sapphires and rubies, tin, and coal are mined.

Siam is located in southeastern Asia, between the French possessions of Indo-China on the east and Burmah on the west, with the Malay Peninsula to the southwest. Most of its area lies between the fourth and twenty-first degrees of north latitude, so that it is essentially a tropical land. Directly to the south is the Gulf of Siam, which opens into the China Sea.

Bangkok, the capital, is one of the largest and most important cities of Asia. Its population is estimated from 600,000 to 800,000, and it is growing rapidly. Although hot and dirty, it is more progressive than most of its northern neighbors. It has an excellent electric street-car system, electric lights on the leading streets, telephones and telegraphs, railroads, hotels, clubs, libraries, and banks; while the River Menam, flowing through its heart, is lined with the godowns, offices, and wharves of exporting, importing, and general shipping firms, as well as with the numerous rice and saw mills of Chinese and European companies. This same river provides an ideal harbor, with abundance of water for all ships that can cross the bar. Seldom are less than a dozen steamers loading and unloading at a time. A fleet of not less than five hundred steam launches plies on the waters, and thousands of smaller craft help to make a scene of activity that lasts from early morning until late at night. There are few ports, even in Europe or America, that have a busier appearance; and the heat of the tropical sun seems to have little effect.

COMMERCIAL CONDITIONS.

Trade is well organized in Bangkok. Banking facilities are excellent, and it is as easy to negotiate drafts or bills of exchange on any important city of the world as in London or New York. There are two large banks—the Hongkong and Shanghai Banking Corporation and the Chartered Bank of India, Australia, and China—both having agents in the leading cities of the United States. They are always willing to supply information to merchants and assist business transactions. The wholesale importing and exporting trade is in the hands of a few large European and Chinese houses, but there are a score or more of lesser firms that do considerable importing and in turn sell to thousands of Chinese and native retail traders. The large houses are strongly capitalized, well conducted, and always ready to deal with American exporters if the latter give them sufficient inducement. Bangkok is a commercial capital, the center of distribution to, and the market of, at least 5,000,000 people. No American merchant need think for a moment that he is entering an uncultivated or doubtful field of trade. He will find facilities here equal to those of Yokohama, Shanghai, Hongkong, and Singapore.

TARIFF.

Customs tariffs and port regulations present no obstacles to the development of trade with the United States. The average import duty, fixed by treaty, is only 3 per cent ad valorem, except on wines and liquors, for which it averages 5 per cent and can not exceed 10 per cent. Export duties are specific, but not heavy. The custom-house service is good, and there is little delay in the examination and delivery of goods. Port charges and light dues are not excessive and do not hamper shipping. Pilotage rates are reasonable.

ADVICE TO EXPORTERS.

All goods coming to Bangkok should be prepared and packed with reference to its damp tropical climate. Preparation that would suit cooler and drier lands will prove entirely unsatisfactory here. The use of hermetically sealed tin casing inside of boxes and packages is strongly recommended for all goods that may be affected by dampness or heat. The oft-repeated warning is again given in this report: Great care must be taken by American exporters in packing goods, in order to compete successfully with their rivals in Europe.

I would also advise the sending of the best possible quality for the lowest possible price. The chief reason which buyers here give for not purchasing in America is that prices are too high. Goods should be selected with reference to this particular market. It should be kept in mind that Siam has a silver currency, which is subject to fluctuation, and that, in the present tendency to decline, a moderate gold price at home may be prohibitive here. In view of these fluctuations, time should be allowed to local buyers for the taking up of drafts drawn by home firms in payment of shipments.

Circulars or smaller catalogues should be printed in the Siamese language. It would also be well to advertise in the local daily papers. Care should be taken to do business only with reliable firms.

COMMUNICATION.

In response to a common inquiry about the exact location of Bangkok, steamship lines connecting it with other ports, and time required to reach it, the following data are given:

Bangkok is approximately 1,200 miles (five and a half days) southwest of Hongkong and 850 miles (three and a half days) north from

Singapore. On the Hongkong route, there is a regular line of thirteen steamers, and on the Singapore line, nine steamers. In addition to these, there is quite a fleet of tramp boats. At Hongkong and Singapore, close connections are made with steamers from San Francisco and New York. If goods are sent by proper routes, bulk need be broken only once—at Hongkong or Singapore. All boxes, bales, and packages should be marked with reference to transshipment at these points. For all exporters on the Atlantic coast or east of the Mississippi River, the cheapest and quickest way is via New York; for those on the Pacific coast, the best way is, of course, via San Francisco, Portland, or Puget Sound cities. Two or three steamers leave New York every month direct for Singapore and Shanghai, and afford the best facilities for that route; but if shipments are sent via Europe by steamers which belong to lines that also run to the Far East, equally low rates can often be obtained. From the Pacific coast, steamers for Hongkong leave every week, and competition has lowered the freight rates. Letters from New York or San Francisco require about forty days to reach Bangkok and ninety days for answers. Telegraph facilities exist, but the average rate to the United States is $1.50 gold per word.

THE FUTURE OF SIAM.

In conclusion and in response to the question, "What of the future of Siam?" I would say that the permanent prosperity and independence of the country depend on the developments of the next few years. The King—Chulalongkorn I—has just returned from an extended trip to Europe, in which he must have seen and learned much that will assist him in improving his own Kingdom. He is a man who has the respect of foreigners and natives alike. He is easily the ablest statesman of Siam, and well fitted to be its ruler.

Siam is making marked progress and, after Japan, is more open to new ideas than any other Asiatic nation. American exporters and manufacturers should do all in their power to establish and maintain a large and lucrative trade exchange with Siam.

JOHN BARRETT,
Minister Resident and Consul-General.

BANGKOK, *January 14, 1898.*

COFFEE IN THE STRAITS SETTLEMENTS.

I inclose, with the suggestion that it be published for the information of the trade, copy of a report on the production and preparation of coffee, made at my request by Mr. T. Gibson, secretary of the United Planters' Association of the Federated Malay States, and transmitted to me through the colonial secretary.

E. SPENCER PRATT,
Consul-General.

SINGAPORE, *January 30, 1898.*

Area under cultivation (approximate) and estimated crops to end of 1899.

State.	Acreage under cultivation, 1897.	Estimated crop.					
		1897.		1898.		1899.	
By Europeans.		*Piculs.*	*Pounds.*	*Piculs.*	*Pounds.*	*Piculs.*	*Pounds.*
Perak	2,122	1,835	244,666	3,265	435,333	5,830	777,333
Selangor	10,000	10,000	1,333,333	12,000	1,600,000	20,000	2,666,666
Negri Sembilan	(*)	1,987	264,933	2,900	386,666	6,942	925,600
Total	12,122	13,822	1,842,932	18,165	2,421,999	32,772	4,369,599
By natives.							
Perak	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Selangor	13,000	7,358	981,066	10,000	1,333,333	13,000	1,733,333
Negri Sembilan	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Total	13,000	7,358	981,066	10,000	1,333,333	13,000	1,733,333
Grand total	25,122	21,180	2,823,998	28,165	3,755,332	45,772	6,102,932

* No return.

EUROPEAN METHOD OF PREPARATION.

The coffee berries are picked when ripe and are passed through a pulper with water, and thus the pulp is more or less separated from the beans, which are then run into a cistern and, after the water has drained off, are left to ferment for three to four days. This fermentation having made the saccharine matter on the beans soluble, water is run into the cistern and the beans washed until it has entirely disappeared. The beans at this stage are known as parchment, and this, on being taken from the cistern, is dried either on mats in the sun or by artificial dryers, to such a state that on being hit with a hammer it breaks into pieces. After this, the parchment is run through a peeler, which removes both the parchment skin and the silver skin within that, and more or less polishes the bean, which is now ready for the market. Hitherto, the coffee produced in the Federated Malay States has not been sized or graded, only picked over to remove broken or black beans; but sizing is certain to become general in the immediate future.

NATIVE METHOD OF PREPARATION.

No great care is taken by the native growers to see that only ripe coffee is picked, and consequently there is always a large proportion of green, unripe berries in their pickings. This coffee is crushed between two corrugated wooden rollers, with small strips of iron at intervals on the corrugations. After this, the pulp and beans are spread out to dry in the sun, generally on the ground, mats being seldom used; and the coffee is frequently exposed to all conditions of weather before it is ready for cleaning, which is done by means of rice stampers worked by coolies. As the native-cured coffee is never dried to within 20 per cent of the European coffee, the result, after pounding, is generally an evil-smelling, dirty-colored bean. No sizing is ever attempted, and little picking.

MARKETING.

Hitherto, the clean coffee has simply been packed in bags and shipped to Singapore for sale, and, as long as prices were high, as in 1895 and 1896, when No. 1 Liberian fetched $40* to $47 per picul (133⅓ pounds), against $38 to $45 for Bali and Palembang, planters were satisfied; but when No. 1 Liberian fell in 1897 to $25 per picul and Bali and Palembang coffee remained at $40, it became evident that some other market for estate coffee must be found, the more so as there were good grounds for thinking that the main cause of the fall in estate coffee was through the mixing of the estate-grown coffee with the native grown and cured article, which was then shipped to Europe and America as "Straits merchantable." To obviate this pernicious practice and insure our coffee reaching the home consumers unmixed, many planters sent their parchment all the way to Ceylon, where it was peeled and packed in the manner coffee Arabica was treated years ago in that island, and, it is said, the experiment has been successful in every case. Efforts are now being made, with every prospect of success, to start central curing establishments at Klang and Port Dickson, and this will undoubtedly tend to place our coffee in a pure and unadulterated form before the public, where it can stand or fall on its own merits.

BANKING ENTERPRISE IN KOREA.

I have the honor to inclose an extract from the Kobé Chronicle of February 5, pertaining to the Russo-Korean Bank.

Two gentlemen are now located in Seoul in connection with this bank, which has already received $100,000 of the money of the Korean Government, and will soon begin a regular banking business.

HORACE N. ALLEN,
Consul-General.

SEOUL, *February 15, 1898.*

THE RUSSO-KOREAN BANK.

[From the Kobé Chronicle, Saturday, February 5, 1898.]

A telegram from St. Petersburg, appearing in the Times, says: "The new Russo-Korean Bank is a companion institution of the Russo-Chinese Bank, which was established here two years ago. Both banks are substantially the same, being founded and managed by the same persons and intended for the same purposes in China and Korea, under the supreme control and direction of the Russian Minister of Finance. The Russo-Korean Bank is, in fact, only an offshoot of the Russo-Chinese Bank, and both have sprung out of the Russian International Bank, whose chief director, M. Rothstein, enjoys an extraordinary reputation as the cleverest

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* Mexican silver currency.

friend and adviser of M. Witte, and as such possesses very powerful financial influence. The right and privileges of the new bank are extensive, including the transport of goods by sea, river, and land, the acceptance of merchandise on security, the issue of warrants, the minting of Korean money, the payment of interest on loans contracted by the Korean Government, and the performance of other financial operations and the acquisition of every possible concession with the consent and permission of the Russian Minister of Finance and the Government of Korea. It is needless to say that M. Witte is the presiding spirit over all these financial experiments in the Far East, the political significance of which is obvious."

ELECTRIC RAILROADS IN SEOUL.

I have the honor to inform you that a company has been formed in the city of Seoul for lighting the streets and residences with electricity and for operating electric street railroads through the principal thoroughfares. Only the latter will be begun at once.

The company, known as the Seoul Electric Company, is composed entirely of Koreans, with the governor of the city as president. They have an exclusive franchise from the Department of Public Works, Agriculture, and Commerce, and have paid in about one-half of the capital of $300,000.

This company has made a contract with Mr. H. Collbran, of Denver, the American contractor for the construction of the Seoul-Chemulpo Railroad, for the construction and equipment of an electric trolley street railroad of the latest and most improved design. The railroad will be about 6 miles in length, and will run from the station of the Seoul-Chemulpo Railroad, through the south gate of the city, along the broad streets, past the new palace and foreign quarter, through the busiest part of the city and the great east gate, to the tomb of the Empress.

Mr. Collbran has received a cash payment of $100,000 with his contract, and the work will be rapidly prosecuted.

It is regarded as a profitable enterprise, since, with a city of 300,000 people and no amusements, there will probably be enough passenger traffic from curiosity seekers to make it pay for a year or so, while the people are being educated to the point of regarding the road as a necessity.

At present, all the financial ventures of importance in Korea are in the hands of Americans.

HORACE N. ALLEN,
Consul-General

SEOUL, *February 15, 1898.*

PROGRESS OF THE SIBERIAN RAILWAY.

At a combined meeting of the committee of the Siberian Railway and a department of the imperial council, which took place on the 10th of December of the past year, the work in the construction of the Siberian Railway was considered. The construction of the first section of the central Siberian line (including the branch to the town of Tomsk), with the exception of minor unfinished work, is completed; and it is now possible to begin regular traffic. The work on the second section of the central Siberian line, on the Irkoutsk Baikal, on the North Ouroussissky and Perm Kotlass sections is shown as follows: Seven hundred and eighty dessiatines (2,105.76 acres) of forest have been cut down and trunks uprooted, 2,329,000 cubic sagen (29,586,925 cubic yards) of earthwork have been laid, 224,960 square sagen (1,224,782 square yards) of railway embankment have been made, and 12,232 cubic sagen (156,391 cubic yards) of masonry have been completed. The laying of stone and cast-iron piping has been effected on the whole length of the Central Siberian Railway, and about 3,500 sagen (24,500 feet) of piping have been laid on the remaining sections. The construction of large and small bridges, with wooden and metal arches, is complete to the six hundred and thirtieth verst (four hundred and seventeenth mile) of the second section of the central Siberian line, as also on the North Ouroussissky Railway; and besides this, 241 bridges have been constructed on the section beyond the Baikal mountain range. One thousand and twenty-three versts (678.24 miles) of the main and station lines have been laid, of which 853 versts (565.53 miles) have been ballasted. One thousand and two line and station buildings have been erected on these railways. The water supply is opened and 47 stations are being partially supplied. Of sleepers, 1,163,600 are prepared, and 4,495,100 poods (81,163 tons) of rails and fastenings. There have been completed 32 locomotives and 756 freight cars and platforms. The sections of the North Ouroussissky still in the course of construction will soon be finished.

On the 1st of September of the past year, the first through train from Vladivostock arrived at Kharabarovsk. For the construction of a railway ferry across the Baikal Lake, parts of the frame and machinery of a ferry ice cutter and the machinery for a floating dock have been conveyed to the town of Krasnoyarsk and to the village of Listvinnichnoia, where storehouses and workshops are erected. The work of putting the parts of the ferry ice cutter together and of constructing piers on the lake has been begun. For the improvement of the navigation on the rivers Angora, Schilka, Amour, and

Oussouri, soundings were made and navigation charts prepared. There are now employed on these rivers 2 steamers, 1 steam launch, 6 barges, and 2 dredges. The construction of a stone quay in Vladivostock has been commenced. The general result of the work from 1895 to 1897 is shown as follows: Earthwork, 7,536,500 cubic sagen (95,741,462 cubic yards); rails laid, 2,959 versts (1,696.61 miles); ballasted, 3;051 versts (2,022,81 miles).

THOS. SMITH,
Consul.

MOSCOW, *March 9, 1898.*

AGRICULTURAL PRODUCTS IN SAMOA.

For the last year there has been an abundance of rain, and crops in Samoa are considered good.

Of course, most of the productions consist of tropical fruits, and these can only be used for home consumption, as the distance is too great to make it practicable to place them in the markets of the world.

A large number of bananas and pineapples have been shipped to Auckland and Sydney; limes and pineapples have also been sent to San Francisco. It is hoped that something may transpire to cause competition in the carrying business, as the rates of the Oceanic Company are almost prohibitory.

There seems to be a good demand for copra, and I am informed that if all of the Samoan Islands were producing, it would in no way affect the market. From 80 to 110 tons of copra are shipped by each steamer to the United States, and of course a large amount is sent to other countries.

It seems to me that capital might be profitably invested in bottling and canning many of the products of these islands. I think that the chocolate or cacao tree could with proper effort be made the leading industry of the islands, and that its production must be profitable.

Knowing that Mr. H. J. Moors is well informed on the subject, I took the liberty of asking him to express his views in writing, and, with his consent, I inclose a copy of his article.

L. W. OSBORN,
Consul-General.

APIA, *February 17, 1898.*

THE CACAO INDUSTRY IN SAMOA AT THE COMMENCEMENT OF 1898.

[Extracts from an article by H. J. Moors.]

In 1892 it was announced that some cacao trees that had been introduced by the German Plantation Company were in a thriving condition, and that they were bearing prolific crops of a very well flavored bean. A small sample shipment had been made, and a most favorable report had followed the expert inspection to which the product had been subjected in Germany. Application was at once made to D. H. & P. Gellschaft for seed of this plant, and they agreed to supply them at the high rate of 25 cents a pod, each containing from twenty-five to forty seeds.

The prospect of enlarging the industries of the islands and of stimulating production attracted more or less attention, and a pamphlet on the subject of cacao was published in the Samoan language and freely distributed.

Much interest was aroused, and a great many cacao pods were purchased at the very high rate demanded. Hardly a district remained in Samoa in which there was not a number of these trees, and had it not been for the extreme poverty of the natives at that time, a fine beginning would have been made. Efforts were made to induce the German company to lower the selling price of their seed, but without avail.

At this time, and with seed obtained in this way, Mr. Stevenson planted many acres of cacao, which have since been neglected and are now of little value. Mataafa put in about 700 trees, and a good beginning was made at Pago-Pago. These promising native plantations were utterly ruined during the wars of 1894–95, and hardly a tree was left standing.

In 1895 and 1896 fully 250,000 seeds were distributed among the Samoan natives, and most all of these were properly planted. Unfortunately, the severest drought that has ever been known in Samoa followed these laudable exertions, and it is likely that not above 10 per cent of the total amount has survived the dry seasons of 1896 and 1897. Cacao, which was a year old and upward at the commencement of these seasons, seemed to remain stationary, while all the young plants that were exposed to the sun died completely out.

Since October, 1897, the weather has been very favorable and much cacao has been planted. Many foreigners are now convinced that this is the most promising crop that can be raised, and that it will be safe and profitable. It is likely that a factory for the preparation of the beans will be started in Apia very soon, the intention being to buy the pods fresh from the trees.

I estimate that at the present moment there are 75 acres of bearing cacao trees in Samoa, that next year there will be twice as many, and that in 1901 the yield will be quite large.

Five years hence I believe the cacao yield will bring more money into Samoa than the copra product does at the present time. Good seed is now procurable at the rate of 2 cents per pod.

Personally, I have had some experience in the cultivation of the cacao tree, and by the end of March of this year, I hope to say that I have 42 acres under cultivation on Upolu and 6 acres at Pago-Pago. Some of this will bear next year, and nearly all in 1900.

At Papalaloa, I first cleared off all the forest trees and weeds. I then had holes 18 inches in diameter and 2 feet deep dug at regular intervals of 15 feet all over the ground. These holes were left open from two to three weeks to air the soil. While this was going on, I had bananas planted at regular distances of 15 feet apart, in such a position that the banana trees would, when large enough, shade the cacao. Experience has shown me that the highest Samoan banana is the best for this purpose, its fruit being as large and as well flavored as that of the lower Chinese variety.

As soon as I had my bananas set out, I planted pumpkins irregularly all over the ground. These vines grow rapidly, and soon cover the soil in such an effective way that weeds and grass will not grow near them. They do not interfere seriously with either the bananas or the cacao; in fact, owing to the slower growth of the bananas, the pumpkins are needed to protect the young cacao until the bananas have matured so as to cast an effective shadow. When the pumpkins are all in, I fill the holes made for the cacao, throwing away all the small stones, etc. When the hole is within 2 inches of full, I have the neighboring topsoil scraped, making the place quite level. I then plant three cacao seeds, just as they are taken from the pod; in fact, the man doing this work carries with him a small basket of pods, which he opens and uses as he goes. These seeds are set out in a triangle, about 9 inches apart. It is understood that only one of the resulting trees will be allowed to survive. If we have rainy weather, it will be necessary to weed the land in about six weeks' time, but it will be well to allow the weeds to grow as long as possible, as their shade is necessary to the young cacao until the pumpkins are far enough advanced to take their place. It is dangerous to expose the young cacao to the sun until it has at least six or eight leaves. In pulling the weeds they should be well shaken, so that all the dirt is expelled from the roots, which are turned up to the sun so that they will die.

After the first weeding, if showers occur, the pumpkins grow with great rapidity, sending up leaves 3 feet high. The second weeding, which ought to take place about two months after the first, will not be very difficult, as the pumpkins will pretty effectually prevent the growth of grass and weeds, without seriously affecting the banana and cacao. Within ten months the banana plants arrive at maturity and cast good shadows; in the meantime the pumpkins bear heavy crops, which are used for feeding pigs and cows. At the end of the first year, the banana crop ought to more than pay all of the working expenses of the plantation.

When the cacao is three years of age it will be producing a remunerative crop. The first yield will consist of from 20 to 30 well-developed pods per tree, increasing each year until as many as 350 pods will be produced by a good tree; 200 being about the average on a five-year-old plant. As 1 pound of prepared cacao beans may be secured from 11 to 15 pods, according to their size, it will be seen that our trees produce results not surpassed by any cacao-growing district in the world. The quality of the cacao is said to be equal to any growing elsewhere, and if these assertions are correct our prospects are excellent.

Another and simpler method of raising cacao is sometimes resorted to in Samoa, and our very best plantations were started in that manner. The planter cuts out all the undergrowth and small trees from his land, and digs his holes at the usual distance apart. After airing the holes and refilling them, they are planted and allowed to grow without any further attention until the following rainy season. Then more of the trees are cut out, so as to allow sunlight to enter. At the commencement of the third rainy season, the remaining large trees are ring barked, so that they will die. In the course of time they rot and fall down in pieces without doing much damage. When this method is resorted to, there is very little weeding to do, as weeds do not thrive under the forest shade. Of course, the planter can not cultivate bananas (which require the sun) and he has to finance his own way through the first three years without their help.

It is an excellent idea, whichever plan is adopted, to establish a few nurseries at convenient spots in the fields, so that if any of the plants fail to come up, or if they die, they can quickly be replaced by plants nearly or quite as large. A number of small Samoan baskets are made, filled with rich soil, and placed together in a shady situation. In each is planted a cacao seed. These soon grow into good-sized shoots, and when a vacancy occurs in the fields, one of these baskets can readily be carried there and planted in place of the missing tree. The baskets are very slightly made and soon rot.

Cacao trees seem to be healthy and strong in Samoa, and to require no shade after they have reached maturity. In fact, those planted in the shade seem to bear far less than those which are unprotected. On one of the plantations owned by a

German firm, the mice have done some damage to the crops by eating the seed as they ripened. So far, they have not injured any other that I have heard of. If, however, these pests become annoying, I think that they can be driven out of the fields altogether by allowing the pigs to roam. The latter will destroy the young mice, and the animals will soon disappear.

I do not know any part of Samoa in which cacao will not grow. It is believed that it is most successful in plantations ranging from 500 to 1,500 feet above the sea level. In exposed locations, it will be found imperatively necessary to plant wind-brakes for shelter during the gales of January, February, and March. Land suitable for this culture can now be had from foreigners at rates varying from $3 to $25 per acre, or be leased for 25 cents per acre for forty years from natives. Laborers may be engaged at rates from $5 to $10 per month per man, including rations, which cost the planter from $4 to $5 for each laborer in addition. At the present time quite a number of free Polynesians are to be found in and about Apia, ready to work on these terms; but it must be understood that if large tracts of land are to come under cultivation in the near future, this scale of wages will necessarily advance, unless additional laborers are introduced into the country.

Many of the Samoans are fairly industrious, and, though they do not care to work by the day, where they have to keep regular hours and be guided by bell taps, they are frequently ready to accept contracts for clearing lands at rates that are far from dear. They usually do their work in such instances in an acceptable manner, though often they take a long time. My plantation at Papalaloa (60 acres) has now cost me $6,500, or about $108 per acre.. This includes cattle, pigs, poultry, houses, fencing, gates, etc. I expect to realize $60 to $75 annually from every acre of cacao in full bearing. The land not planted with this product will serve for horses and cattle. When the bananas are finally destroyed, I will feed my pigs largely on breadfruit, which I am setting out for wind-brakes.

At the present time, my sales of fruit exceed my expenses, so that I can say, when my cacao is finally bearing, that it will have cost no more than $100 per acre. It would be useless for people of little means to come here with the idea of successfully starting a cacao plantation. No one should attempt it with less than $2,500 in hand, and a larger sum would be better.

On the whole, I believe the agricultural resources of Samoa are valuable, and that they should attract attention. Investigation, I think, will convince anyone that the cacao industry has a bright future.

SHEEP AND WOOL IN AUSTRALASIA.

The following reports are replies to an instruction sent from the Department of State on August 28, 1897, at the request of Hon. William Lawrence, president of the National Wool Growers' Association, to whom ADVANCE SHEETS of the reports have been sent:

NEW ZEALAND.

I have the honor to inclose a tabular statement showing the number of sheep in, and the total wool product of, the colony of New Zealand for the years 1855, 1858, 1861, 1864, 1867, 1871, 1874, 1878, 1881, 1886, 1891, and 1896. The colony was founded in 1840, but 1855 seems to be the earliest year for which there are any statistical sheep records. I am therefore unable to include the years 1820, 1830, 1840, and 1850, as requested. The years for which the sheep are given were census years. A record is taken every year, but not nearly so exhaustively as in the census returns.

Table showing the number of sheep and the weight and value of the wool in New Zealand.

Year.	Sheep.	Wool.	
		Weight.	Value.
	Number.	*Pounds.*	
1855	761,933	1,772,344	$453,099
1858	1,523,324	3,810,372	1,235,912
1861	2,761,583	7,855,920	2,622,929
1864	4,937,273	16,691,666	5,251,425
1867	4,818,579	27,152,966	7,692,027
1871	9,700,629	37,793,734	7,816,299
1874	11,674,863	46,848,735	13,821,292
1878	13,069,338	59,270,256	16,024,445
1881	12,985,085	59,415,940	14,148,206
1886	16,564,595	90,853,744	14,954,612
1891	17,865,423	106,187,114	20,123,394
1896	19,138,493	129,151,624	21,372,450

FRANK DILLINGHAM,
Consul.

AUCKLAND, *November 15, 1897.*

NEW SOUTH WALES.

In response to the instruction from the Department dated August 28, 1897, I communicated with the government statistician of this colony, inserting a few additional questions which I thought might be of interest to our people, and the following is a reply, with the information desired.

GEO. W. BELL,
Consul.

SYDNEY, *October 22, 1897.*

INCLOSURE IN CONSUL BELL'S REPORT.

GOVERNMENT STATISTICIAN'S OFFICE,
Sydney, October 21, 1897.

DEAR SIR: In reply to your letter of the 11th of October, I beg to inform you that sheep were first introduced into New South Wales on the foundation of the colony on the 26th of January, 1788, the live stock brought out by Captain Phillip, R. N., the first governor, including 29 sheep. Wool was first exported about the year 1800, its destination being England.

The inclosed statement will give you the figures you require with respect to the increase in the number of sheep and in the production of wool.

Yours faithfully,

J. R. MARTIN,
For Statistician.

G. W. BELL, Esq.,
Consul for the United States of America, Sydney.

Number of sheep and production of wool of New South Wales.

Year.	Sheep.	Production of wool.
	Number.	*Pounds.*
1822	*138,755	*172,880
1828	*536,391	....
1830	....	*899,750
1840	....	*8,610,775
1842	*4,804,946	....
1850	*13,059,324	*32,361,829
1855	†8,602,499	†17,671,684
1860	6,119,163	12,809,362
1865	8,132,511	29,858,791
1870	16,308,585	47,440,610
1875	25,353,924	88,066,330
1880	35,398,121	177,915,978
1885	37,820,906	194,826,051
1890	55,986,431	267,319,780
1895	47,617,687	323,668,058
1896	48,318,790	303,061,122

NOTE.—In 1891 there were 61,831,416 sheep, the highest number recorded for the colony.
* Includes territory now known as Victoria and Queensland.
† Includes territory now known as Queensland.

TASMANIA.

In conformity with instruction of August 28, I furnish the information required, as nearly as it is obtainable, as follows:

Year.	Sheep.	Wool.		
		Production.	Exported.	
	Number.	*Pounds.*		
1821	42,003	147,840	£3,917	$19,106
1830	680,740	....	29,191	142,058
1840	1,089,987	3,636,900	223,667	1,086,870
1850	1,822,320	5,855,100	248,869	1,219,101
1855	1,835,902	5,858,458	378,822	1,843,437
1860	1,700,930	4,537,918	370,427	1,802,683
1865	1,752,719	4,923,965	381,625	1,855,718
1870	1,349,775	4,146,913	246,402	1,199,115
1875	1,719,768	6,199,248	433,550	2,109,871
1880	1,783,611	9,025,228	542,240	2,638,751
1885	1,648,627	5,774,142	260,480	1,267,626
1890	1,619,256	8,984,281	419,173	2,039,905
1895	1,523,846	7,223,219	202,341	984,692

A. G. WEBSTER,
Consul.

HOBART, *October 15, 1897.*

VICTORIA.

In compliance with the instruction dated August 28, 1897, I transmit a statement showing the number of sheep in this colony and the production of wool during certain years between 1820 and 1895. The return was very kindly furnished by the government statist of the colony, who informs me that no statistics are available prior to the year 1836, and that the figures given in the return for 1895 are in reality those for 1894, no estimate having been made since the latter year.

Total number of sheep in Victoria and production of wool, 1836–1895.

Year.	Sheep.	Wool production.
	Number.	*Pounds.*
1836	41,332	…………
1840	782,283	941,815
1850	6,032,783	18,091,207
1855	4,577,872	22,584,234
1860	5,780,896	24,273,910
1865	8,835,380	44,270,666
1870	10,761,887	52,123,451
1875	11,749,532	44,529,871
1880	10,360,285	53,135,509
1885	10,681,837	53,390,100
1890	12,692,843	55,559,286
1895	*13,180,943	78,925,402

* Figures for 1894, no estimate having been made since.

JOHN P. BRAY,
Consul-General.

MELBOURNE, *November 3, 1897.*

RUBBER CULTURE IN ECUADOR.

In reply to an inquiry from a resident of Philadelphia, Consul-General De Leon sends from Guayaquil, under date of February 26, 1898, a report in regard to rubber in Ecuador. The report, which has been forwarded to the inquirer, is given in part below:

The cultivation of rubber is a new industry in Ecuador. Hitherto, rubber has been obtained from wild trees, but the ruthless destruction of the plants by the greedy rubber seekers, who do not hesitate to cut them down in order to obtain a trifle more gum, has played havoc with the trade of this coast. In the remote regions, there are still large forests; but inefficient transportation increases the cost.

An effort is being made to obtain from the Government an 8-year concession for the exploitation of rubber and quinine in a territory covering from 8 to 10 square leagues in the province of Tungurahua. This has drawn the attention of the people to the cultivation of the rubber tree, and stories of the fortunes made in Africa are in circulation. Cocoa and coffee have been the chief products of this Republic, but the hope is cherished that at some time the rubber crop will equal them in value.

Brazil, the first country to use rational methods in the production of rubber, now exports, it is said, $30,000,000 or $40,000,000 worth per annum. The cultivation of rubber is also receiving serious attention in the Republic of Colombia. The increasing demand has given an immense impetus to the business.*

The rubber tree is too well known to require description. It is not only one of the most valuable, but also one of the most ornamental of trees; its leaves, of a dark green color, being simply beautiful. Our conservatories give one a faint idea. The contrast between trunk, limbs, and leaves is vivid. It can be grown in any kind of soil, moist as well as dry, from a temperature about 60° F. up to one much higher. It can not be grown successfully in the frost zone. The tree possesses the peculiar property of fertilizing instead of sterilizing the soil; its roots attract moisture greedily and, when they decay, form with the leaves a fertilizer of superior quality.

Ecuador produces every known species of the rubber tree in great abundance, from the *Ficus dolairia* in the vulgate *Ragasron*, to the *Urceola*, the most beautiful of all; the same can be said of Colombia. The best qualities are produced in the more temperate regions of the tropics. At somewhat over 64° F., the tree yields the most gum; at a lower temperature than 64°, the exuding gum quickly solidifies, closing the incisions and stopping the flow.

PLANTING.

Planting is easy and inexpensive, and the returns very tempting. A good tree should yield from $15 to $20 per annum. There are two methods—from the seed and from the shoot. The former takes from six months to one year longer than the latter. Statements (like those regarding orange culture in Florida) vary widely as to period of maturity, some claiming that the tree will yield when from four to five years old and some that it requires a much longer period.

PLANTING FROM THE SEED.

The best seeds are obtained in August, the next best in December; they should be perfectly dry and gathered only after the fruit is well ripened. They should be planted in pots or boxes, after the style of tobacco or coffee, watered morning and evening, and given a due amount of sun. When the plant is from 3 to 4 inches high, it is transplanted to the spot where it is to remain, the earth being well loosened as well as moisened around the hole. It then should be well watered daily for a week or ten days and allowed plenty of sun; if transplanted in moist soil or during rainy season, watering is unnecessary. After ten or fifteen days, the tree can be left to itself, if the plant is healthy and vigorous, until ready for tapping. The plantation should be kept free of underbrush, weeds, etc., especially around the base of the tree.

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* The imports of rubber into the United States during the fiscal year 1897 were: Rubber, free of duty, 35,574,449 pounds, valued at $17,457,976; rubber, dutiable, $297,953; old, scrap, and refuse for remanufacture, 3,653,945 pounds, valued at $113,722.

The tree should be planted in "quin-cunx" order and at a distance apart of not less than 20 feet. In the intervals, plantain or other large-leaved trees are set out for the purpose of giving the proper amount of shade to the young tree. When it is desired to fence a plantation with rubber trees, they should be placed very close together; they very soon unite in Siamese-twin fashion, forming a continuous and almost impenetrable wall.

PLANTING FROM THE SHOOTS.

The shoots should be broken off, not cut, from the parent stem—the larger the better—and the wound healed with moist clay; otherwise, the tree is liable to dry up. The shoots are at once placed in the hole, the earth around them being loosened and moistened. They are buried a little more than half their length, and some of their leaves covered with earth. Thus treated, they do not rot, and sprouting is facilitated. The rainy season is the best time for shoot planting. After the cutting commences to sprout, no further care is necessary, other than that stated above, until time for tapping. The plantation requires fencing, as cattle are very fond of the young plants.

TAPPING.

Testing.—When a tree is supposed to be ready for tapping, the bark is cut and the gum examined. If it readily coagulates from the heat of the hand or from applying a little alcohol, it is in the proper condition; if the gum resists coagulation, the tree is immature.

Method.—(1) The dirt and mold are cleaned from the tree in the places where the incisions are to be made.

(2) About a foot or more from the ground an earthenware vessel is attached to the tree by means of moist clay.

(3) Just above the mouth of this vessel, a transverse cut, reaching to the woody fiber of the tree, is made.

(4) Above this, a vertical cut is made from as high a point as

possible and continued downward until it reaches the horizontal incision. A long-handled iron or steel tool in the form of a bird's claw is used for this purpose.

(5) On either side of the vertical, oblique cuts are made from 6 to 8 inches apart. Tapping should commence at dawn, when the moon is on the wane, and be continued not later than 9 a. m. A strong sun causes the sap to rise. The incisions should be made at a single stroke, to avoid the phenomenon of "hiding the milk," an expressive and thoroughly descriptive phrase in vogue here. The rubber tree seems to possess a nervous system, affected more or less by light, heat, electricity, etc.; and, unless the blow is effective, reaching at once to the woody matter, the tree contracts its fibers, reducing the size of the sap cells contiguous to the incision and forcing the gum to the upper part of the tree.

Periods.—The tree is usually tapped four times during the first year of its maturity, and the intervals of rest are gradually diminished, until it can be tapped monthly. The rubber tree is the milch cow of the vegetable kingdom; its yield continues to increase with frequent and skillful milking until it reaches its maximum. Properly cared for, a tree will yield steadily up to its fortieth year; in some instances, as long as fifty or sixty years. The yield of gum, as well as the market price, is variable; but, as before stated, a healthy tree should yield a revenue of $15 to $20 per annum.

COAGULATION.

The two methods of coagulating most in vogue among the people are by smoke and heat of the sun; both are defective. In order to expel the large amount of whey in the gum, it is necessary, where the first method is employed, to bring the rubber so close to the fire that it loses its elasticity, becomes waxy, and is discolored. The second method is likewise faulty; a few hours after its extraction the rubber commences to putrefy, loses some of its properties, requires from fifteen to twenty days to dry, and emits an offensive and unhealthy stench. To obtain rubber of pure quality, the following method of coagulation is best:

The tappings of the various trees should be thoroughly mixed in a vessel with aqua ammonia, in the proportion of 5 ounces of the latter to 1 gallon of the gum; this preserves the gum in its milky state for an indefinite period, and allows it to be easily strained and the dirt and mold to be removed. After straining, a little 36° proof alcohol should be stirred into the mixture; immediate coagulation ensues. It is then put into a press and the whey squeezed out, after which it is placed in the air until thoroughly dried, which requires from two to three hours. After this it can be packed without risk of putrefying, all germs having been destroyed by the ammonia and alcohol.

TESTING THE GUM.

The method of testing is as follows:

From each of the trees to be tested, a little of the gum is taken, coagulated, and strained. From each quantity a round ball, about the size of a lemon, is molded, and, when dried, the balls are dropped from a height upon a hard surface; the rebound determines the elasticity and quality of the rubber.

GRADE, ETC.

The best class of rubber is pure white and elastic, and the demand seems ever to be increasing. In some parts of Colombia a rubber tree is grown producing an abundance of caoutchouc—as much as 25 pounds or more. It is known as black gum, from its dark color, and will thrive at as low a temperature as 58° F.

RUBBER FROM LEAVES.

Gum is obtained by passing the freshly plucked leaves through rollers and expressing the juice. The leaves are also exported after being well dried. By recently discovered methods they can be dissolved and about 25 per cent of rubber of good quality obtained.

REMARKS.

The thousand and one uses to which rubber is now applied renders it one of the most valuable products of these countries, and offers a tempting field for United States investment. The barbarous methods referred to, in use by ignorant "Cholos" and semisavage Indians, will undoubtedly be replaced by civilized and intelligent processes.

There are immense tracts of land in Ecuador suitable for rubber cultivation which can be had for a mere song, and I am satisfied that President Alfaro would warmly welcome American capitalists and settlers. The latter should have sufficient means to support themselves until the tree reaches maturity. Living in this country is very cheap, nearly everything growing spontaneously. Food is inexpensive and but little clothing is necessary. Should the projected railroad to Quito become a reality, immense tracts of rubber forests will be rendered available for exploitation which at present are too remote to be utilized.

I should state that I can not personally vouch for the accuracy of the descriptions of rubber cultivation, etc., which are given above.

The verbal accounts which I have been able to obtain conflict somewhat with newspaper articles on the subject.

It seems to me that land in Florida is adapted to the cultivation of rubber. After several years' residence in that State, I think that conditions are favorable for this industry, as well as for the cultivation of camphor and olive trees.

DANGERS OF THE YUKON REGION.

The Federated Mining Institute of the Dominion of Canada is now in session in this city. At the session last evening, two experienced, practical miners, who have spent several years in the Yukon gold regions, were present and gave expression to views in regard to affairs in that country that may be of interest to people who contemplate going there.

Mr. Christie, the principal speaker, declared that under present conditions there were too many people in the district now, and those who were physically and intellectually unfitted to cope with the hardships of pioneer life should not venture their chances in the wild scramble. He gave it as his opinion, based on his own experience and personal observation at Dawson, that many of the glowing reports which reach civilization in regard to the finds of gold are largely exaggerated. He had passed into the country over the Skagway trail, and the difficulties were so great as to be almost insurmountable to many. There were crevices and holes in which the pack horses got stuck, and he had seen them go down out of sight, packs and all, in the mud. He knew of something like three thousand horses being lost there, and had himself contributed thirty of that number.

He said he had known many men who had started out altogether unprovided and yet had managed to make their way to the gold fields, while, on the other hand, some of those who had set out supplied with everything that seemed necessary for the journey had failed to get through and had abandoned the undertaking. To seek gold in the Klondike, he declared, men of hardy physique were needed. Professional men and clerks he regarded as unfit to endure the hardships of the trip to, and the life in, the Klondike region. In conclusion, Mr. Christie said that the pictures of the Klondike wealth had been largely overcolored, and many of the reports regarding rich finds had been sent out by parties in order to enhance the price of their claims. He did not believe they would ship $70,000,000 in gold out of that country this year, or anything like that sum.

The production of gold there, he said, was bound to be more or less limited, owing to the natural disadvantages attending mining operations.

Mr. Fred. Hyde, who represented what is called the "first three hundred" of 1886, and who had been associated with Jóseph Ladue and other well-known pioneers of the Yukon, corroborated the views expressed by Mr. Christie, and said that the immense rush of gold seekers to that country was a great mistake and must result in disaster to thousands.

The number of people going from the eastern Provinces of Canada to the Klondike region is considerable, but apparently is not nearly so large as the inflow from the United States.

Mr. L. A. Phillips, agent of the Alaska Exploration Company of San Francisco, who has been here for a month, has purchased of Canadian merchants $500,000 worth of goods, including, clothing, canned goods, condensed goods, liquors, and other supplies, which are to be shipped from here to San Francisco, and thence by the company's vessels by way of St. Michaels to Dawson and other points on the Yukon River.

JOHN L. BITTINGER,
Consul-General.

MONTREAL, *March 3, 1898.*

CANADIAN DUTIES ON MINERS' OUTFITS.*

In answer to a request for information as to duty charged on personal effects of miners purchased in the United States and going to the Klondike region, I have the honor to give below a copy of instructions issued to customs officers on these matters:

To Collector of Customs,
Port of———.

MINERS' OUTFITS TO KLONDIKE REGION.

Re free entry of travelers' baggage under memorandum No. 962*b*, as follows:

(1) Wearing apparel, articles of personal adornment, toilet articles, and similar personal effects of persons arriving in Canada may be passed free, without entry at customs, as travelers' baggage, under the provisions of the customs tariff; but this provision shall only include such articles as actually accompany and are in the use of, and as are necessary and appropriate for the wear and use of, such persons for the immediate purpose of the journey and present comfort and convenience, and shall not be held to apply to merchandise or articles intended for other persons or for sale.

In the absence of rulings by the board of customs as to articles included in the foregoing regulation, customs officers at the port of entry are to decide the class and quantity of the wearing apparel and like articles in use entitled to be passed free, under the above provision, having due regard to the length of the journey and to the reasonable requirements of the traveler for his comfort and convenience on the journey.

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*This information was obtained at the request of a transportation company of New York, to which ADVANCE SHEETS of the report have been sent.

Articles of personal adornment, however, may be held to include one watch and the jewelry ordinarily in use by the traveler.

For a traveler to the Klondike region, a pair of blankets and a fur robe, and changes of apparel for use on the journey, may be passed free.

Miners' gold pans are free under tariff item No. 555 as separators.

The duties on goods imported into the Klondike region (Yukon district) are the same as are payable on the goods imported into any other part of Canada.

The following articles are subject to duty at the rate undermentioned, as per customs tariff:*

Articles.	Duty.
Tents	35 per cent.
Stoves	25 per cent.
Blankets (excess baggage or merchandise)	35 per cent.
Woolen clothing (excess baggage or merchandise)	Do.
Rubber clothing (excess baggage or merchandise)	Do.
Rubber and other boots and shoes (excess baggage or merchandise)	25 per cent.
Tools:	
Adzes, cleavers. hatchets, saws, wedges, sledges, hammers, crowbars, picks, mattocks, anvils, and vises.	30 per cent.
Axes	25 per cent.
Shovels and spades, iron or steel	35 per cent.
Lamps and lanterns	30 per cent.
Guns, rifles, revolvers, cartridges, primers, percussion caps, wads, cartridge cases, loading tools, and cartridge belts of any material.	Do.
Cutlery	Do.
Steam engines, boilers, and other machinery	25 per cent.
Provisions, etc.:	
Meats, salted or dried	2 cents per pound.
Canned meats and canned poultry and game, extracts of meats and fluid beef not medicated, and soups.	25 per cent.
Lard, lard compound and similar substances, and cottolene	2 cents per pound.
Candles not elsewhere specified	25 per cent.
Candles, paraffin wax	30 per cent.
Soap—	
Common or laundry	1 cent per pound.
Castile, mottled or white	2 cents per pound.
Other	35 per cent.
Soap powders	30 per cent.
Butter	4 cents per pound.
Cheese	3 cents per pound.
Milk, condensed	3¼ cents per pound.
Condensed coffee with milk, milk foods, and all similar preparations	30 per cent.
Cornmeal	25 cents per barrel.
Oatmeal	20 per cent.
Rice	1¼ cents per pound.
Rice and sago flour, and sago and tapioca	25 per cent.

*The Canadian tariff was printed in CONSULAR REPORTS No. 205 (October, 1897), p. 151.

Articles subject to duty—Continued.

Articles.	Duty.
Provisions, etc.—Continued.	
Biscuits—	
Not sweetened	25 per cent.
Sweetened	27½ per cent.
Wheat flour	60 cents per barrel.
Canned vegetables	1½ cents per pound.
Desiccated or evaporated vegetables	25 per cent.
Canned fruit	2¼ cents per pound.
Tea	10 per cent.
Coffee, roasted or ground	2 cents per pound and 10 per cent.
Extracts of coffee or substitutes therefor of all kinds	3 cents per pound.
Chocolate and other preparations of cocoa	20 per cent.
Nutmegs and mace	25 per cent.
Ginger and spices of all kinds, unground	12½ per cent.
Ground spices	25 per cent.
Drugs of one substance	20 per cent.
Drugs and medicines of more than one substance, nonalcoholic	25 per cent.
Drugs and medicines, alcoholic	50 per cent.
Sugar	1 cent per pound.
Sirup and molasses	¾ cent per pound.
Cigars and cigarettes	$3 per pound and 25 per cent.
Cut tobacco	55 cents per pound.
Other manufactures of tobacco and snuff	50 cents per pound.

CHARLES E. TURNER,
Consul-General.

OTTAWA, *March 15, 1898.*

FISHING INDUSTRIES OF BRITISH COLUMBIA.

I have recently visited one of the three sturgeon fisheries on the Fraser River. This fishery is located at Bon Accord, on the south bank of the river, about 12 miles above New Westminster, which is 12 miles from here.

On the morning of my visit, I found thirty-six fish, weighing 125 pounds for the smallest, up to 400 and 500 pounds each for the largest. One fish was taken at Bon Accord in January that weighed 916 pounds. These fish are dressed, packed in ice, and shipped to Chicago and other points in the Eastern States.

The other two sturgeon fisheries are located at New Westminster, on the north bank of the Fraser River. I am told that one of them has the best cold-storage plant in the Province. It is estimated that from 800,000 to 1,500,000 pounds of sturgeon will be exported during the present season—which ends in May next—from these fisheries to the United States.

With each carload of sturgeon (amounting to about 20,000 pounds), some 1,000 or 1,200 pounds of sturgeon roe are shipped; this is forwarded to Europe to be made into caviare. The spinal cord is drawn out and dried, and sold to the Chinese here or shipped to China. No other portion of the fish is now utilized. The head, tail, fins, and intestines are all dumped into the river.

The Fraser River sturgeon is very different from the sturgeon caught on the shores and in the rivers of New England. The fish here are without the heavy scales which are the chief characteristic of sturgeon in the East. The meat is very firm, fine, palatable, and not too highly flavored.

It is stated that the sturgeon fishery on the Frazer River was begun only six years ago. Before that time, I am informed that 1,000,000 pounds were taken out of Pitt Lake, of which the outlet is the Fraser River, in a single year.

With some method of utilizing the portions of the fish now wasted, I believe these sturgeon fisheries would become an exceedingly profitable industry. The fish are, under the laws of Canada, caught in nets, and not with hooks. The mesh of the net is required to be large enough to allow the escape of the smaller and younger fish.

I am informed that these fish yield a very large amount of oil, for which a profitable market might be found. Undoubtedly, the heads, tails, fins, etc., would yield an excellent quality of glue. The skin of this fish is very thick and strong, and could be tanned, and would make an excellent quality of leather for use in harness and for other purposes where great strength and pliability are required.

At the present time, a large amount of food for dogs, used as beasts of burden in Alaska and in the British Northwest Territory, is required, and I believe that the portions of the sturgeon now wasted could be utilized for dog biscuit and would find a ready sale. I find that my own dog prefers sturgeon steak to beefsteak.

It appears to me that here is an opportunity for some citizen or citizens of the United States to establish a profitable industry. Intelligence would be needed, but not very large capital. I understand that valuable portions of the enormous catch of salmon are wasted in the same way as are those of the sturgeon. The sturgeon fishery is carried on from the first of November to the last of May; the salmon fishery begins in April or May and continues until the last of September, so that a concern using this waste material might be operated during the whole year.

THE FISH HATCHERY.

Upon the invitation of J. M. McNabb, superintendent of the fish hatcheries for this Province, I went last week to visit the fish hatchery near Bon Accord, on the Frazer River. Here we found 6,000,000 salmon, from 1 to 1½ inches in length. These little fish are to be taken very soon to the head waters of the stream in which they would naturally have been hatched, 40 miles distant, and will then be turned loose in the small streams of pure fresh water. They thence find their way to the Pacific Ocean, where they remain until they reach maturity, when they return to the Frazer River and its tributaries to deposit their spawn, and are caught with hooks, hand nets, and seines; and sometimes they come in such numbers that they may be captured with pitchforks.

It is stated that for many years there was one year in every five in which very few salmon came to this river. The plausible reason given is that at some time, in some unknown way, the young salmon were destroyed, and consequently there were none to come in the year in which they should have reached their maturity.

This hatchery was established nine years ago. The year 1896 was expected to be the barren year. Few salmon were expected, but the run of the fish proved to be one of the largest ever known. Everybody here attributes this fact to the work of the hatchery.

The season of salmon fishing was about over when I arrived here, late in August of last year, so that I can not speak of it from personal knowledge or observation. It is said that so great was the number of fish and so easily were they caught that the fishermen were obliged to accept far less recompense for their work than in any previous year.

The following statistics have been furnished me by the inspector of fisheries for this Province:

Output of canned salmon from Fraser River canneries for eight years and of young salmon from the Fraser River hatchery during the same period.

Year.	Canned salmon.	Young salmon.
	Cases.	*Number.*
1890	240,633	4,419,500
1891	177,658	3,603,500
1892 (off year)	67,022	3,300,000
1893	460,000	5,964,000
1894	363,556	6,300,000
1895	432,920	6,360,000
1896 (off year)	375,000	6,363,000
1897	879,116	6,042,000

	Pounds.
Salmon canned in British Columbia in 1897	49,255,245
Sturgeon caught in Fraser River in 1897	1,137,696
Halibut caught in provincial waters in 1897	1,525,000

The value of the fishery product of the Province of British Columbia in 1897 was $5,834,764.90.

HALIBUT FISHERY.

At present, the New England Fish Company is the principal organization engaged in the halibut fishery in this Province. The fish are caught upon the coast from 100 to 200 miles north of here. This year, the company has found it difficult to secure steamers for this service, as all the steam vessels on this coast secure exceptional freight rates to carry wheat and flour to Europe, Australia, China, Japan, and India. Vessels not adapted to such trade secure very valuable profits in conveying miners and their outfits to Alaska.

The New England Fish Company has had a steamer built for their service at Bath, Me. This steamer is now on her way from Boston to this port, coming around Cape Horn.

Halibut are so plentiful on the fishing grounds upon this coast that they are caught in comparatively shallow waters, so that only the young fish, weighing 50 pounds or less, are taken. These fish in the East are called "chicken halibut," and are regarded as very choice.

The halibut are caught by men who leave their vessel in dories. Each steamer takes about thirty men with about six dories. In a recent voyage two men were lost, being out in a dory when a storm arose.

The halibut caught on the coast is of very excellent quality. It is dressed upon an island near the fishing grounds, packed in ice, brought to this port, and sent to Boston, arriving, I am informed, in excellent condition. Without doubt this industry will be very largely increased as soon as steamers for this service can be secured.

The New England Fish Company is an association of the wholesale fish dealers of Boston and New York, working in conjunction with the Atlantic Halibut Company, of Gloucester, Mass., a corporation of vessel owners and outfitters. The companies are organized for the purpose of securing sufficient trade to cover the cost of production, which is greater than is incurred in catching other varieties of fish.

The following is an extract from a letter received by me in reply to my request to the general manager of the former company for information relative to this industry:

> The halibut fishery on the Pacific coast is carried on at various points, but principally at or near Dixon Entrance, between Queen Charlotte's Island and Prince of Wales and Ravizegado islands, during the winter months, from September to March, inclusive. The fishing grounds at this point are somewhat sheltered from the severe gales common to that locality. The fishing is conducted in much the same manner as on the Atlantic coast, and the fish are taken mostly on a sand bank, some 10 to 20 miles from the north end of Queen Charlotte's Island. Some fish have also been taken in the north end of Hecate Strait, from 3 to 20 miles from the banks and Goshen Islands. No doubt the halibut are nearly as abundant in other

more exposed localities, but up to the present time no attempt has been made to look for them elsewhere. The banks off the Alaskan coast are reported to be swarming with them in winter, but distance and the exposure to strong southeast gales have prevented anything being done as yet.

The market for halibut in the fresh state, the only way in which it can be marketed extensively, is mostly in the United States, there being not enough demand in the Canadian markets to pay for operating an outfit for them alone. From three to four carloads a week (each car containing about 20,000 pounds) is an ample supply for all markets within reach of the product.

THE CRAB FISHERY.

Very recently a company has been formed in this city, now employing between forty and fifty men, for catching crabs, which are cooked and canned. These crabs are more than double the size of the crabs on the Atlantic coast, and are of an excellent flavor. They are of the hard-shell species and are well adapted to be deviled.

OTHER FISHERIES.

In the lakes and streams near here, there are brook trout, white fish, and other excellent food fish. In the salt water here are also smelts, and several other varieties of excellent food fish. There are, along the coast, three or four varieties of the codfish, but they do not seem to be as good as those upon the Atlantic coast.

Undoubtedly, the fishing industry upon this coast is rapidly increasing. The facilities for sending fresh fish to the East are also being continually improved.

L. EDWIN DUDLEY,
Consul.

VANCOUVER, *March 16, 1898.*

CANADIAN FISHERIES REPORT.

Under date of March 4, 1898, Consul Beutelspacher, of Moncton, sends a newspaper clipping giving the report of Canada's fisheries for the past year:

> The fisheries report for the past year has been issued. The administration of the fisheries service cost $443,568. This sum included $154,389 paid as fishing bounties. The revenue received from fishery licenses, fines, etc., is given at $106,469.
>
> The fishing bounty of $154,389 was paid to the deep-sea fishermen of the maritime Provinces during the year 1896. Of this amount, $57,014 were divided among 862 vessels, manned by 5,665 men, and $97,385 among 23,821 fishermen using 14,106 boats. The total number of claims paid on bounty was 14,975.
>
> The value of the sea and inland fisheries in 1857 was estimated at under $1,000,000, and in 1859 they were valued at about $1,500,000; but in 1867 they had reached $4,000,000; in 1877, $12,000,000; in 1887, $18,386,000; and in 1897, $20,400,000.

The amount by Provinces is given as follows:

Nova Scotia	$6,070,895
New Brunswick	4,709,433
British Columbia	4,183,999
Quebec	2,025,754
Ontario	1,605,674
Prince Edward Island	976,126
Manitoba and Northwest	745,543

While the Provinces of New Brunswick, Quebec, and Ontario gave an aggregate increase of $575,310, the other Provinces show a decrease of $367,224, making a net surplus of $208,086 over the total value of last year.

Of the various kinds of fish caught, salmon amounted to $4,001,679; cod, $3,619,385; herring, $2,909,744; lobsters, $2,205,762. The balance is made up of fifteen other kinds of fish, ranging in value from $773,345 to $132,942.

The quantity of fish used as bait is valued at $384,219, and that of fish oil at $224,633. The seal skins are valued at $520,250.

Canada's fisheries yielded last year $20,400,000. This was the product of 75,000 men, 30,000 of whom were deep-sea toilers. The capital invested is placed at $9,750,000, and 36,600 craft of all kinds were employed.

MANGANESE MINING IN NEW BRUNSWICK.

In the beds of "wad," or bog manganese, which are known to exist in large quantity in two places and may no doubt be found in others, New Brunswick has a mineral product not existing elsewhere to any extent. The hard manganese ore that is found in pockets in the rock formation is, of course, quite familiar; but to find the material in a bed varying from 5 to 30 feet in thickness, immediately under the turf or first layer of soil, and so soft that it can simply be shoveled up without the aid of a pick, is novel in manganese mining.

If this fine, flour-like deposit of the mineral could be treated as simply as the hard ore from the mines, it would, of course, be of great value. But that is not possible, and up to the present time there appears to be only one process of treating it with any success at all.

To be available for commercial purposes, this pyrolusite, or manganese dioxide, must be converted into what is technically termed ferro-manganese. This must be done through the agency of a blast furnace. Hard manganese ore can be treated simply enough, but this bog ore, or "wad," after the 50 per cent or thereabouts of water has been dried out of it, becomes a fine, dry powder. Put it into a blast furnace and it would simply blow away.

The great aim of all experiments has been, therefore, to discover some suitable substance to mix with the powder to bind it together in such form that it would stand the furnace and enable the operators to produce ferro-manganese, which, as everybody knows, is used in the manufacture of steel.

The reading public will remember that Edison, in his famous iron works in the New Jersey mountains, first separates the iron from the sand in the ore, and then takes this iron, which is also in the form of a fine sand, and, by employing a "binder," is able to convert the iron sand into iron bricks which will stand the operations of the blast furnace.

Such a process of treating the manganese bog ore has been discovered and has stood the test, and is now to be applied by the Mineral Products Company, of New York, at the great bed of this ore found at Dawson Settlement, half a dozen miles from Hillsboro, in Albert County. An American company tried once before to utilize the ore, but was not successful. The present owners are satisfied that they can succeed, and have indeed proved it by actual test. It may be added that theirs is the only process known which has proved effectual. It involves a large expenditure and a complicated plant, and their works in Albert County are the only ones of the kind in the world.

The Mineral Products Company is incorporated under the laws of New York. Hon. F. C. Sayles, of Pawtucket, R. I., is president; F. C. Sayles, jr., of Providence, R, I., treasurer; Dr. Edwin F. Ward, of New York, secretary; Russell P. Hoyt, of New York, general manager; N. M. Langdon, of New York, superintendent of works.

The company began operations in Dawson Settlement six months ago and has spent about $50,000 in purchase of land, clearing it up, and erecting the plant. Forty men have been employed until lately. They are now awaiting the beginning of operations in the works, which will start in a short time and be run night and day, employing ninety hands or more and treating probably 100 tons of ore daily.

The company owns 400 acres of land, on 17 of which the ore is found under a thin coating of soil or vegetable matter extending to a depth of 5 to 30 feet. The ore can be got out by merely shoveling it into the cars.

I paid a visit to the place, which is about 15 miles from Moncton. The deposit lies on a hillside, with a slightly higher elevation behind it and a deep gully running along its base. The place is covered with a thick growth of woods. Seventeen acres of this have been cleared, stumps taken out, and drains dug. The ore lies in a bed of varying thickness all over it. A man with a pick went with me and on the sides of the drains and in the holes dug all over the place sunk the pick through the coating of frost, and everywhere the ore was disclosed.

A singular fact is that there is quite a number of living springs on the property. There are two close together on the highest point of the deposit. The scientific theory of the deposit appears to be that in the hills back of the bed there is manganese in place or in formation. If the former supposition is correct, there must be a very large deposit of the ore, and streams of water passing over these beds have carried the ore in solution to the place where it is now deposited, and perhaps is still being deposited, as "wad," or bog ore.

This bog ore in its natural state contains about 50 per cent of water, and this, of course, must be extracted. When that is done, the result is, as stated, a powder black in color and about as fine as flour.

The company has erected the plant at the foot of the hill that forms the ore bed, the lower side of the structure being on a level with the bed of the gully. A branch railway comes to the back door. The building is equipped with heavy machinery specially made for the work. There is an 80-horsepower engine and a 50-horsepower boiler. The "drier" is a brick chamber 10 by 44 feet and 30 feet high, in which there is a revolving cylinder of half-inch iron, 5 feet in diameter and 28 feet long.

The process through which the ore must pass is a very interesting one. It goes in as rough ore, looking to the unpractised eye not unlike any other blackish-colored fine earth, and it comes out in the form of a hard, black, cylindrical brick, 3 inches in diameter and 2½ inches long.

The process is not easy to understand without being seen, and even then, of course, the secret by which the dried powder is cemented together is known only to the company that controls it. The ore is brought in little tram cars from the ore bed, a distance of only 600 to 1,000 feet, and, running into the building, is dumped on a platform, on a level with the feeding hopper of the revolving drier already spoken of. It is shoveled into this hopper, and the revolving drier, which is kept heated by wood or coal fires, carries it to the back end of the brick chamber, where it drops into a spiral conveyor, which carries it out of the chamber to the boot of a bucket elevator, by which it is raised to the top of the building, some thirty odd feet, where it passes through a revolving screen. The fine ore sifts through the screen into what is called the dry-ore bin. The coarser part, which will not sift through, goes on and out of the farther end of the revolving screen, and is carried from thence down into a grinder, which powders it, and it is then carried back to the boot of the elevator and up again to the revolving screen, through which this time it sifts without diffculty into the dry-ore bin.

But this is not all. Above the brick drier is a dust chamber with a V-shaped bottom, provided with a spiral conveyor. Any fine ore passing off from the drier along with the steam or gases settles in the bottom of the dust chamber, is carried out by the spiral conveyor, and passes to the boot of the elevator, up to the revolving screen, and into the dry-ore bin. Thus, every bit of the ore is saved. The steam and gases pass out through two smokestacks rising from the dust chamber above the drier.

The ore from the dry-ore bin is drawn into a mixer, where it is united with a suitable "binder," the purpose of which is to cement the powder together. The mixed material is then carried up to a sufficient height to pass in at the top of the briquetting machine, a very complicated piece of mechanism, from the bottom of which the ore comes out in the hard, cylindrical bricks or briquettes already described. These briquettes are carried to a pocket on the level of the railway, which has capacity to store 250 tons, and from which the ore is shipped on cars to be taken to the company's blast furnace at Bridgeville, Nova Scotia.

The company would have erected a blast furnace at Hillsboro, but there was some difficulty in getting a site, and it purchased the furnaces at Bridgeville, Nova Scotia, which, along with a fine belt of hard wood, happened to be on the market. The briquettes will be taken by rail to Bridgeville, converted into ferro-manganese, and from there can be shipped to steel works in any part of the world.

The company has had the property examined and reported on by seven of the best experts in the United States and Canada, and the ore analyzed by ten of the principal steel makers and prominent chemists of the United States; and the result shows that the ore deposit is a valuable one. The analysis is as follows:

	Per cent.
Metallic manganese	48.24
Metallic iron	5.70
Sulphur	0.096
Phosphorus	Trace.
Silica	1.88

This analysis was made on the dried mineral at 212° F. The value of the ore is shown by the very slight proportion of phosphorus and sulphur. No process has yet been discovered that will eliminate phosporus. When an ore contains more than 0.1 per cent of phosphorus or more than 12 per cent of silica, the price is scaled down in proportion to every unit above these figures. The Albert County ore is thus very valuable, if it can be successfully prepared for the blast furnace.

The ore is covered by a few inches of vegetable matter. A cubic yard of the ore in its natural state weighs 1,900 pounds.

Besides erecting the plant, the company has built a branch line of railway from the works to Stony Creek, 1½ miles distant, on the S. and H. Railway. The latter connects with the Inter-Colonial Railway at Salisbury, 11 miles away, over which the ore is taken to Bridgeville; this connects the works with the Grand Trunk system and practically with the railway system of the continent. It is only 5½ miles from the works to Hillsboro, where, at a wharf which the company proposes to construct, vessels of 1,000 tons can lie; and thus there will be direct water communication with Boston, New York, Philadelphia, and other American ports, and also with Europe by vessels which come there to load lumber. The vessel freight rates to United States ports is $1.50 and to British ports about the same.

When the works are in full operation, it is expected that 50 tons of briquettes per day will be shipped to the blast furnaces. Mr. Langdon, the superintendent of works, has had long experience in manganese working in New York State, and his inventive skill has been utilized in adapting the briquetting machine to its present purpose. There has been some difficulty in getting this new machinery properly adjusted and the "binder" effectively mixed with the ore; but they were making hard briquettes when I was there, and were confident that in a very short time the plant would be in full operation day and night. Machinery practically does it all, from the time the ore goes into the hopper of the revolving drier until the briquettes come out. The building is equipped with an elevator, connecting the floor where the briquetting machine stands with the storage room beside the railway.

The market value of ferro-manganese to-day is $46.50 per ton, delivered at buyers' works. Two tons of the bog ore will make 1 ton of ferro-manganese, which is the only material that will successfully purify steel. It is imported by steel works from South Africa, Spain, Cuba, Mexico, and Japan, and is not therefore found in quantity in any country. In Canada, the returns show that only 12 tons were produced in 1896.

There is also a deposit of "wad" at Point de Bute, which has been secured by the Mineral Products Company. There is a bed, said to cover 100 acres to a depth of 5 to 15 feet. There may be deposits in other parts of the Province, and possibly in Nova Scotia.

GUSTAVE BEUTELSPACHER,
Commercial Agent.

MONCTON, *March 16, 1898.*

RAILWAY SUBSIDIES IN CANADA.

In view of the recent discussion on the proposed subsidy for the Stikine–Teslin Railway, I send a table of per-mile cash subsidies paid in aid of railway construction in Canada, showing amount of subsidies paid to November 1, 1897:

Name of railway.	Number of miles built.	Subsidy paid to November 1, 1897.
Albert Southern	16	$50,460.00
Bai des Chaleurs	70	620,000.00
Beauharnois Junction	19.50	62,400.00
Belleville and North Hastings	6.84	21,888.00
Brantford, Waterloo, and Lake Erie	18	57,600.00
Brockville, Westport, and Sault Ste. Marie	44.50	105,200.00
Buctouche and Moncton	31.75	101,600.00
Canada Atlantic	54.05	282,355.20
Canada Central	120	1,525,250.00
Canada Eastern	107	342,400.00
Canadian Pacific	1,905	25,000,000.00
Extension	185	1,580,000.00
Caraquet	67	224,000.00
Central of New Brunswick	44.50	137,100.00
Cornwallis Valley	14	44,800.00
Columbia and Kootenay	27.75	88,800.00
Cumberland	14	39,850.00
Dominion Lime Company	4.80	15,360.00
Dominion Coal Company	27.44	87,808.00
Drummond Counties	89.98	287,936.00
Elgin, Petitcodiac, and Havelock	12	38,400.00
Erie and Huron	30	96,000.00
Esquimault and Nanaimo	71	750,000.00
Fredericton and St. Mary's Bridge Company	1.33	30,000.00
Grand Trunk, Georgian Bay, and Lake Erie	12.42	39,744.00
Great Eastern	12.50	40,345.00
Great Northern	44.05	142,688.00
Guelph Junction	15.25	46,000.00
Harvey Branch	3	5,553.57
Hereford	48.50	155,200.00
Irondale, Bancroft, and Ottawa	45	144,000.00
International	49	156,800.00
Joggins	12	37,500.00
Kingston and Pembroke	15	48,000.00
Kingston, Napanee, and Western	61.35	208,732.80
L'Assomption	3.50	11,200.00
Lake Erie and Detroit River	84.04	338,731.00
Lake Temiscamingue Colonization	45.84	310,335.95
Leamington and Lake St. Clair	16	51,200.00
Lothbiniere and Megantic	30	96,000.00
Montreal and Sorel	44.67	93,757.57
Montreal and Lake Champlain	83	103,600.00
Montreal and Western	70	361,270.00
Montreal and Lake Maskinonge	12.90	41,280.00
Montreal and Ottawa	33	105,700.00
Montfort Colonization	21	67,200.00
Nakusp and Slocan	36.80	117,700.00
New Brunswick and Prince Edward Island	35.45	113,440.00
New Glasgow Iron and Coal Company	12.45	39,840.00

Subsidies paid to November 1, 1897, in aid of railway construction in Canada—Cont'd.

Name of railway	Number of miles built.	Subsidy paid to November 1, 1897.
Northern Pacific Junction	110	$1,320,000.00
Nova Scotia Central	73.50	230,700.00
Ontario, Belmont, and Northern	9.60	30,720.00
Ontario and Quebec	61.25	196,000.00
Orford Mountain	26.50	84,800.00
Oshawa Railway and Navigation Company	7	22,400.00
Ottawa and Gatineau Valley	54	284,128.00
Ottawa, Arnprior, and Parry Sound	107	430,400.00
Parry Sound Colonization	47.75	152,800.00
Pontiac and Pacific Junction	70	193,578.00
Phillipsburg Junction	6.75	21,600.00
Pontiac and Renfrew	4.25	13,800.00
Port Arthur, Duluth, and Western	84.75	271,200.00
Quebec Central	74.86	348,342.00
Quebec and Lake St. John	245.85	1,006,743.50
Quebec, Montmorency and Charlevoix	30	96,000.00
Shuswap and Okanagan	51	163,200.00
South Norfolk	17	54,400.00
St. Catherines and Niagara Central	12	38,400.00
St. Clair Frontier Tunnel	2.23	375,000.00
St. Lawrence and Lower Laurentian	38.85	217,600.00
St. Louis, Richibucto, and Buctouche	7	22,400.00
St. Lawrence and Adirondack	20.32	65,001.60
Temiscouta	112.95	645,950.00
Thousand Island	4.33	24,400.00
Tilsonburg, Lake Erie, and Pacific	16	51,200.00
Tobique Valley	27.88	134,016.00
Toronto, Grey, and Bruce	4.60	14,656.00
United Counties	59	187,328.00
Waterloo Junction	10.25	32,800.00
Western Counties	20	500,000.00
Western Ontario Pacific	18.75	60,000.00
Cap de la Magdeleine	2.32	7,424.00
Gulf Shore	17.50	38,400.00
St. Stephen and Milltown	3.50	9,635.89
Total		41,809,808.08

CHARLES E. TURNER,
Consul-General.

OTTAWA, *March 14, 1898.*

RAILWAY CONTRACTS IN VENEZUELA.

PERICO-CRUCERO RAILROAD.

Consul Plumacher writes from Maracaibo, under date of March 8, 1898:

I inclose translation of a contract made with the Venezuelan Government for the construction of a railroad between the port of Perico and that of Crucero, both points being situated on the right bank of the Orinoco River in the Federal Amazon Territory.

[Translation.]

The Minister of Public Works of the United States of Venezuela, being authorized by the President of the Republic, and Messrs. Custodio Milano, Emilio Antonio Santodomingo, Ramón Contasti Laveaux, and Francisco E. Rivero Saldivia, all having the right to contract, have agreed upon the following contract:

ARTICLE 1. The National Government grants to Generals Custodio Milano, Emilio Antonio Santodomingo, Ramón Contasti Laveaux, and citizen Francisco E. Rivero Saldivia, the exclusive right to construct and exploit a railroad that, crossing the rivers Atures and Maypures, shall unite the port of Perico with that of Crucero, both points being situated on the right bank of the Orinoco River in the Federal Amazon Territory.

ART. 2. The Government of the Republic recognizes the right of property in the above-mentioned railroad for the term of ninety-nine years; and after said period the railway, with all its material—stationary and movable—its stores and offices, shall be transferred to the nation in a good state of preservation and shall become national property.

ART. 3. The National Government shall not allow any other person, syndicate, or company to establish railroads of any kind at the same places during the period of forty years, in accordance with the law of May 17, 1897.

ART. 4. The railroad may employ steam or electric power, according to the choice of the company, and shall have one track with a width between rails of 75 centimeters (2 feet 5 inches) and a minimum radius at the curves of 30 meters (99 feet 3 inches), and with a declivity not to exceed 3 per cent, unless other special systems are adopted.

ART. 5. The work of construction on said railroad shall begin within one year, counting from the date on which this contract is approved by Congress, and shall be completed within the term of three years.

ART. 6. Interruptions in the work through unforseen causes or superior force will give the contractors the right to an equal time to that lost, whether it be in commencing the work, in the presentation of plans, sections, or sketches, or in the completion of the same.

ART. 7. The contractors are obliged to present the general plan of the line to the Government for approval; also the drawings, with plane, longitudinal, and transverse sections of each part, three months before beginning work.

ART. 8. The Government of the Republic declares this railroad to be of public utility and, in conformity with article 5 of the law already mentioned, grants a subsidy of 20,000 bolivars ($3,860) for each kilometer (0.62137 mile) of line constructed, said payments to be made in installments corresponding to each section of 10 kilometers completed. This payment shall be made at the Treasury of Public Works from the funds appropriated for this purpose, after notice has been given of the completion of the section and after the report of the engineer appointed by this Department has been received.

ART. 9. The National Government grants to the contractors, in accordance with article 12 of the law above mentioned, the following privileges and exemptions:

First. The right to expropriate, according to law, private lands which may be required for the building of the line, its switches, offices, warehouses, and depots. The Government shall order the expropriation, and the company shall pay the value of the same, according to law.

Second. The right to introduce through the custom-houses, free of duty, during the term of the concession, all materials, instruments, machinery, and other utensils necessary for the construction, preservation, and exploitation of the line and its buildings, as well as of the telephone and telegraph lines used by the company.

Third. The right of taking from the national forests, without paying indemnity, all of the wood and materials necessary for the construction, preservation, and exploitation of the line.

Fourth. Exemption from all national taxes or contributions, with the exception of the stamp tax, which belongs to the Department of Public Instruction.

Fifth. The right of acquiring (after complying with the legal formalities) those mines and quarries which may be found in the course of the line.

Sixth. The right to utilize all waterfalls as motive force during the time of this contract.

Seventh. The National Government grants to the company the right of property in the public lands occupied by the tracks, stations, offices, and depots; also portions of lands on both sides of the line, measuring 1,000 meters (3,280 feet) in front by 500 meters (1,640 feet) in depth, alternating with portions of equal frontage which shall be reserved by the nation.

ART. 10. The tariff of fares and freights shall be decided upon in accordance with the National Government; the contractors being bound to convey gratis all mails, and to convey troops, public employees in active service, and Government merchandise at half rates.

ART. 11. The contractors may commence the work of construction of the railroad at any point or at different points at the same time, according to their own convenience.

ART. 12. The company binds itself to comply strictly with article 6 of the law on railroads now in force, depositing in the safe of a national bank as guaranty the sum of 50,000 bolivars ($9,650) in gold, or its equivalent in bonds of the public debt of Venezuela.

ART. 13. The present contract may be transferred in part or in whole to a native or foreign company or companies, after permission of the Government has been obtained; but in no case can it be transferred to a foreign government.

ART. 14. All doubts and controversies which may arise in the execution of this contract shall be decided by the courts of the Republic according to law, and in no case can they become a pretext for international claims.

Made two of one tenor and effect at Caracas on the 5th day of February, 1898.

J. M. MANRIQUE.
R. CONTASTI LAVEAUX.
FRANCISCO E. RIVERO S.
EMILIO A. SANTODOMINGO.
CUSTODIO MILANO.

LOS TEQUES-CUA RAILROAD.

Under date of February 12, Consul Plumacher says:

I inclose translation of a contract made between the Venezuelan Government and Messrs. Francisco E. Rivero and Hermógenes Rivero Saldivia, both residing at Caracas, for the building of a railroad between Los Teques and Cua, in the State of Miranda.

[Translation.]

The Minister of Public Works of the United States of Venezuela and Messrs. Francisco Emilio Rivera and Hermógenes Rivero Saldivia, residents of this city, have closed the following contract.

ARTICLE 1. The National Government grants to Messrs. Francisco Emilio Rivero and Hermógenes Rivero Saldivia the exclusive right to construct and exploit a railroad, which will unite the towns of Los Teques and Cua and pass through Fácata, all these places being situated in the Bolivar District of the State of Miranda.

ART. 2. The Government grants to the contractors property rights for the term of ninety-nine years, and after the expiration of this term the railway, with all of its materials, offices, and warehouses, shall be transferred to the Government in good state and become national property.

ART. 3. The Government shall not allow any other person, syndicate, or company to establish similar lines in the above-mentioned places during the term of forty years, in conformity to the law of May 17, 1897.

ART. 4. This railroad may have steam or electric power, according to the choice of the contractors; it shall consist of one track with a width between rails of 75 centimeters (2 feet 5 inches) and a minimum radius at the curves of 30 meters (99 feet 3 inches), and its declivity shall not exceed 3 per cent, unless special systems be used.

ART. 5. The work of constructing the railroad shall be begun within one year, counting from the date on which Congress approves this contract, and it shall be concluded within three years' time.

ART. 6. Any interruptions in the work caused by superior force or by unforeseen circumstances shall give the contractors a right to a prolongation of time equal to that lost; as well in the beginning of the work, in the preparation of sketches and plans, as in the completion thereof.

ART. 7. The contractors bind themselves to present to the Government for approval the general plan of the line and complete drawings, with longitudinal, transverse sectional, and plane views, three months before commencing work.

ART. 8. The contractors may construct a funicular at a selected spot on the line, which shall not exceed 2 kilometers (1.242 miles), and shall be provided with all modern improvements and appliances to insure safety.

ART. 9. The Government of the Republic declares this railroad to be of public utility and, in conformity with article 5 of the law of May 17, 1897, grants a subsidy of 20,000 bolivars ($3,860) for each kilometer (0.62137 mile) of road constructed, said payments to be made in amounts corresponding to sections of 10 kilometers from the funds for public works and through the Treasury Department, after notice has been given that said sections are complete, and after a report has been received from the engineer who represents the Public Works Department.

ART. 10. The contractors may establish branches to neighboring places, using the steel-cable system, after obtaining permission from the National Government.

ART. 11. The National Government grants to the contractors, as per article 12 of the above-mentioned law, the following privileges:

(*a*) The right to expropriate, according to law, the private lands which they may require for the line for switches, offices, warehouses, and stores. The Government shall order the expropriation, and the company shall pay for the same according to law.

(*b*) The right of introducing free through the custom-house, during the term of this contract, the materials, machinery, instruments, tools, and articles necessary for the construction, exploitation, and preservation of the line and buildings, and the telegraphic lines used by the company; the above to be subject to the legal provisions governing the same.

(*c*) To appropriate, without paying indemnity, the public lands, woods, and other materials necessary for the construction of the line.

(*d*) To be exempted from all national taxes or contributions, excepting the stamp tax, which is under the Department of Public Instruction.

(*e*) To have a preferential right over other persons or corporations (after the requisites of law have been complied with) in the acquisition of mines or quarries found on the railway line.

ART. 12. The tariff rates for freight and passengers shall be agreed upon between the contractors and the National Government.

ART. 13. The contractors bind themselves to always convey gratis the mails dispatched by the national post-offices to the places reached by the line.

ART. 14. The troops and merchandise of the Government and public employees in active service shall always pay half of the regular rates.

ART. 15. The contractors may commence the work of construction of the line at any place, or at different places, as they may prefer.

ART. 16. The contractors, in conformity with article 6 of the law on railroads, are obliged to deposit in bank the amount of 50,000 bolivars ($9,650) in gold, or its equivalent in bonds of the public debt of Venezuela, as a guaranty that they will commence work within the time fixed by this contract; all to be subject to conditions stipulated in the above-mentioned law.

ART. 17. The present contract may be transferred, partly or wholly, to one or more companies, or to another person, after obtaining consent of the National Government; but in no case shall it be transferred to a foreign government.

ART. 18. All doubts and controversies that may arise regarding this contract shall be referred to the courts of the Republic; and in no case can they become matters for international reclamation.

Made in two copies of one tenor and effect at Caracas, on the 18th day of January, 1898.

J. M. MANRIQUE.
FRANCISCO E. RIVERO.
H. RIVERO SALDIVIA.

CONTRACT FOR CABLES IN VENEZUELA.

I have the honor to forward inclosed a translation of a contract made between the National Executive of Venezuela and Mr. Edward Rauber, a French merchant residing at Caracas, for the construction of steel cables between Valencia and other towns in the State of Carabobo.

E. H. PLUMACHER,
Consul.

MARACAIBO, *February 21, 1898.*

TRANSLATION OF CONTRACT.

The Minister of Public Works of the United States of Venezuela and Edward Rauber, a French citizen, merchant, now residing at Caracas, have made the following contract:

ARTICLE 1. The Government of the United States of Venezuela grants to Edward Rauber, or his successors, heirs, etc., the exclusive right to establish and exploit lines of steel cables for the transportation of merchandise and fruits between the cities of Valencia, capital of the State of Carabobo, and Nirgua, capital of the district of Nirgua, of the same State, as well as to intermediate points—Chirgua, Canoabo, La Mona, Bejuma, Montalban, Miranda, and Salom.

The contractor is authorized to construct branch lines to all of the places near the above-mentioned towns, after notifying the National Executive, in accordance with article 6 of this contract.

ART. 2. Edward Rauber binds himself to begin work on the different sections within the following periods, which shall be counted from the day on which this contract is approved by Congress: On the section between Valencia, Cirgua, and Canoabo, within six months; on the section between Chirgua, La Mona, Bejuma, Montalban, and Nirgua, within eighteen months.

ART. 3. Edward Rauber is obliged to finish the first section of the cable and have it open to the public within one year, and the second section within three years. If the contractor should not be able to conclude and deliver same in the specified time, owing to unforeseen circumstances, the National Government shall allow him a prolongation of time equal to that lost.

ART. 4. If the contractor does not commence the work of construction of any of the sections within the specified time (unless prevented by superior force) the National Government may declare this contract to be void.

ART. 5. The contractor binds himself to employ in the construction of the cable lines the best of materials and of machinery, such as those already used with success in this class of construction.

ART. 6. The National Government grants to Edward Rauber, his successors or heirs, the right to import free through the custom-houses the cables, wires, machinery, apparatus, instruments, tools, and other necessary articles for the construction of the various sections of the cable, if the same are accompanied by the proper declarations and if other formalities required by law are complied with.

ART. 7. The contractor shall decide, after conference with the National Government and with a commission of experts appointed for the purpose, the freight rates to be charged on merchandise, animals, fruit, wood, and other products, binding himself not to make the rates more than half of those now charged in these towns.

ART. 8. The contractor binds himself to carry free of charge the mails for these places and to transport for one-half of the tariff prices the different articles which the nation or State may require.

ART. 9. The contractor is authorized to establish telephone and telegraph lines between these places, for the exclusive use of the company; and the wires and apparatus which are introduced for this purpose shall be exempted from custom-house duties.

ART. 10. The contractor can make use of any public lands situated adjacent to the lines in the different sections, if they should be required for the installation of stations, offices, guardhouses, etc., and, should the contractor need any portion of private land for the same purposes, the Government shall grant him the right of expropriation according to law.

ART. 11. The Government grants to the company all the waterfalls found in the zone traversed by said lines, so that they may be used as motive power.

ART. 12. The company, as per this contract, shall not be obliged to pay national taxes, and its employees and operators shall be exempted from army service, unless in case of international war.

ART. 13. This contract shall last for twenty-five years, and during this term Edward Rauber, his successors or heirs, shall exploit the lines constructed; after the expiration of the period, the lines, with all their appurtenances, shall be transferred in good order to the Government and become national property.

ART. 14. The National Government agrees not to grant to any other person, company, or corporation, during this period of twenty-five years, the right to establish cable lines between the places named in the concession.

ART. 15. Edward Rauber, his successors or heirs, may transfer the present contract to any person or corporation, native or foreign, or to whoever he may see fit, after duly notifying the Government; but in no case shall it be transferred to a foreign government.

ART. 16. All doubts and controversies which may arise regarding this contract shall be decided by the courts of the Republic, and can in no case become matters for international reclamation.

Two copies made of one tenor and effect, at Caracas, on the 13th day of January, 1898.

TRANSPORTATION IN NICARAGUA: DECISION OF ARBITRATOR.

I have the honor to transmit herewith a copy of Gen. E. P. Alexander's decision in a case submitted to him for arbitration by the Nicaraguan Government and the Nicaragua Mail Steam Navigation and Trading Company.*

The adverse decision has been the cause of the suspension of all transportation traffic between this point and the lake, and the Government has formally taken possession of all the steamers of the company.

It is thought possible that the Government will run the boats on its own account, in which case transportation communication with the interior will be resumed.

Mr. Pellas, the sole owner and proprietor, is an Italian subject.

WILLIAM B. SORSBY,
Consul.

SAN JUAN DEL NORTE, *February 25, 1898.*

GREATER REPUBLIC OF CENTRAL AMERICA, } ss.
STATE OF NICARAGUA. }

In the matter of the claim of the Nicaragua Mail Steam Navigation and Trading Company, herein called the company, against the Government of Nicaragua, herein called the Government, for compensation for the carriage of certain troops and officers.

AWARD OF THE ARBITRATOR.

I have been requested by both parties to act as arbitrator in this case, and both parties have expressed to me their agreement that my award in the matter shall be accepted as final.

The facts in the case and the issue between the parties are briefly but substantially as follows:

(1) The company, as a common carrier, operates a line of steamers upon the San Juan River and the Lake of Nicaragua, under a contract with the Government dated November 3, 1894, which confers certain valuable privileges upon the company, upon certain conditions and obligations therein expressed.

(2) For a number of weeks, beginning about November 1, 1897, the Government, apprehending the outbreak of a civil war, placed a guard of soldiers upon each of the company's boats running on the line between Granada and San Juan del Norte, to prevent its being surprised and seized by revolutionists. These soldiers traveled back and forth, upon all trips of the boats, providing their own rations.

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*See CONSULAR REPORTS No. 190 (July, 1896), p. 465.

(3) The company contends that these troops must be considered as passengers, and that the Government must pay fares for their transportation.

(4) The Government denies this obligation, and appeals to the contract above referred to. Paragraph 6 of the contract is as follows:

"The Government may occupy the steamers in case of war, civil or external. At the conclusion of such services, the Government shall return the line in the state they received it, but the wear and tear shall be ascertained by an engineer appointed by the Government and be assessed by two appraisers. The expense of the line during its occupation shall be on the account of the Government, which shall pay to the company the passages and freights that may have been received at the rate of one-third of the tariff rates."

There are two points apparent for discussion in the consideration of these facts:

First. Open war was not prevailing. This fact is urged by the company against the right given in the contract to occupy the boats in case of war.

Second. The occupation of the boats by the Government was not complete, but only a partial occupation.

The second point may be disposed of first, and briefly. It is a principle of law that the right to the greater includes the less. If the Government were justified in taking full possession of the boats, it was justified in taking partial possession. If the company found the partial possession less profitable to them, they might have withdrawn their employees and left the Government in full possession.

So that the whole argument of the company rests upon the fact that open war was not prevailing.

But there are certain facts of public notoriety which must be taken into consideration.

Owing to the mountains and swamps, and the absence even of any wagon roads connecting the eastern and western portions of the country, the control of these, the only steamboats on its waters, is of vital consequence to the Government. For this reason, the first hostile act of a secret enemy would undoubtedly be to capture these boats. The more so, too, that it might be easily accomplished by a small number of men disguised and coming aboard as passengers. In such circumstances, to wait for a hostile act would be to wait until after the horse was stolen before locking the stable door.

Clearly, it must be within the prerogative of the Government to judge for itself when precautionary war measures become necessary.

It is impossible to believe that the Government conceded to the company in the contract any right to decide when such measures should begin or when they should end. The company knew with whom it was dealing and took its contract subject to the exercise of the usual prerogatives of a nation.

It is also a matter of public notoriety that on September 17, 1897, an attempted revolution had been inaugurated by the actual capture of one of these very steamers by a few men disguised as passengers. But their colleagues upon land having failed, the revolution collapsed. And it is equally well known, too, that the defeated parties, some of them concealed at home and others in adjacent countries, have ever since been diligently preparing for another attempt to overthrow the Government. And, actually, while this arbitration has been pending, it is notorious that the attempt has been made, and that it was defeated and failed, to which end the possession of these steamers contributed powerfully by permitting prompt concentration of the governmental forces.

My award in this matter, therefore, is that the Government was fully justified in placing guards upon the steamers and had authority under the contract to do so. It is not, therefore, bound to pay fares for their transportation.

Done at San Juan del Norte, February 18, 1898.

BRAZILIAN FREIGHT RATES FOR AMERICAN FLOUR.

In a communication dated Petropolis, January 28, 1898, Minister Conger incloses a copy of a decree abolishing the freight discrimination against United States flour. The paragraphs relating to the subject are translated as follows:

DECREE OF NOVEMBER 16, 1897.

The President of the Republic of the United States of Brazil: In view of that which the Minister of Industry, Transportation, and Public Works has represented to him, and considering * * * that it is not expedient to maintain, with relation to freight charges, the existing distinction between articles of native production and those imported, in order to avoid abuses which it is not easy to stop; excepting, always, those products of agriculture in the interior of the country which ought to enjoy certain advantages, * * * decrees:

ARTICLE 1. The rates of tariff and charges on the Central Railway of Brazil below enumerated and signed by the Minister of Industry, Transportation, and Public Works are hereby approved.

PRUDENTE MORAES.

Alimentary goods of the first necessity, as wheat flour, rice, beans, meal, fresh vegetables, bacon, edible roots, raw sugar, ordinary salt, up to 100 kilometers (62.41 miles), 90 reis per kilogram (0.012 cent* per 2.2046 pounds); from 101 to 300 kilometers (186.4 miles), 60 reis per kilogram (0.008 cent per 2.2046 pounds); from 301 and above, 40 reis per kilogram (0.005 cent per 2.2046 pounds).

DIONISIO E. DE CASTRO CERQUEIRA.

CONTRACT FOR COINING NICKEL IN BRAZIL.

A well-informed local journal of January 28 contained the following notice:

In accordance with the authorization granted by Congress, the Government has decided to call for bids for the manufacture of 20,000 contos† of reis in nickel coins of 100 and 200 reis. Alloy and coinage shall conform to the provisions of the laws of 1870 and 1890 regulating this matter. The bidders are to give security to the amount of £10,000, which may be made in bonds of the Brazilian foreign debt.

After a conference with our minister, I went to the office of the Secretary of the Treasury to ascertain whether arrangements could be made to receive bids in the above matter in Washington or New York. I was informed that it was too late to change the mode of procedure, but that prospective American bidders would be given ample time to send in their bids.

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* Taking the market value of the Brazilian milreis, January 3, 1898, as 14 cents in United States currency.

† Conto=1,000. The nominal value of the gold milreis is 54.6. The market value of the paper milreis is 14 cents in United States currency.

The matter will be officially published with all details within a fortnight in Rio de Janeiro and about three weeks later in London. Four weeks' time will be allowed from the date of publication there to send in the bids.

EUGENE SEEGER,
Consul-General.

RIO DE JANEIRO, *February 4, 1898.*

SUPPLEMENTARY.

Under date of February 9, Consul-General Seeger says that the call was published on February 6. According to the text, bids will be received at the treasury agency of Brazil in London—until thirty days after the first publication there of the official notice—for the coinage of 50,000,000 pieces of 200 reis and 100,000,000 pieces of 100 reis; alloy, 25 per cent nickel and 75 per cent copper; weight, 15 grams (231.480 grains) for the 200-reis pieces and 10 grams (154.310 grains) for the 100-reis pieces. The whole amount of coins is to be delivered within eight months after date of contract.

NATIONAL MUSEUM AT MANAGUA.

I have the honor to transmit herewith a translated copy of the principal paragraphs of a law promulgated by the President of Nicaragua establishing a national museum at Managua, the capital of Nicaragua. I inclose, also, a copy of my communication to the Minister of Public Works relative thereto.

WILLIAM B. SORSBY,
Consul.

SAN JUAN DEL NORTE, *February 10, 1898.*

On August 21, 1897, a law was promulgated establishing a national museum, styled the "Industrial, Commercial, and Scientific Museum of Nicaragua," for the purpose of collecting objects and articles of natural, industrial, commercial, and scientific interest and of establishing a center of study and culture, and a bureau of information for the people of the country, and for foreigners.

The various branches embraced are: Natural products, agricultural products, industrial products, manufactures and articles of consumption, objects of natural history and of archæology, breeds of live stock and animals, industrial and ornamental trees and plants, and exhibits from abroad.

The museum will be under the direction of the Minister of Public Works.

The collections will be organized in systematic order; the progress of the enterprise will be published; a descriptive catalogue showing the quality, derivation, use, prices, etc., of the exhibits will be printed.

Voyages will be made periodically in search of objects and articles, and all kinds of data likely to be of use to those who may take an interest in the exposition will be collected.

Officials and individuals are urged to cooperate in augmenting the exhibit and in making the exposition a success. The consuls and other officials of the Republic abroad will be directed to obtain information of every description, and to effect exchanges, and to request the sending of exotic seeds and plants.

The manager will select a plot of ground for a botanical garden, in which useful vegetable matter, plants, and trees will be planted, grown, and experimented with.

Animals of the country and from abroad will be cared for and scientifically studied.

The annals of the museum, treating of everything relative to the objects and articles exhibited, voyages, explorations, and discoveries in connection with the work and progress of the museum, will be published.

No article will be permitted to leave the museum without the permission of the Minister of Public Works.

Individuals, whether native or foreign, may communicate with the director of the museum and submit proposals relative to objects and articles of interest to the museum. Whether to purchase, or effect exchange, or to exhibit, the transportation and other expenses must be paid by the respective owners of the articles and objects for exhibit.

Those who assist in the advancement of the museum and who exhibit will be given a special notice in the paper to be published in the interest of the museum, and their names will appear on the object exhibited.

The 15th day of September of each year is designated as national exhibition day, and articles not of use to the museum will be sold at auction, the proceeds of which will be for the benefit of the museum.

In the botanical department, there will be a department devoted especially to the multiplying of the useful species of vegetation and trees of long life, such as balsam, gum, resin, oil, cinnamon, quinine, henequen, ramie, jute, camphor, gutta-percha, cocoa, and others indigenous or adapted to the soil, that they may be distributed among agriculturists with all data possible for the cultivation and propagation of the same.

The museum will have a library that will embrace the sections referred to of arts, industries, commerce, agriculture, physical and natural science, archæology, etc.

A department for commercial and industrial statistics and information, and for the exhibition of photographs, water colors, frescoes, painting, and models of articles will also he established.

The director will keep a classified list of all of the objects and articles of which two samples are on exhibition, for the purpose of sending as exhibits to other expositions, when invited to do so, and to exchange with other museums for objects differing in nature.

The packing and transportation of the articles secured from abroad must be carefully inspected by the director or some one competent and authorized, to avoid the breaking or loss which might occur.

MANAGUA, *October 9, 1897.*

J. S. ZELAYA.
JOSÉ C. MUÑOZ,
Minister of Public Works, by the Law.

CONSULATE OF THE UNITED STATES,
San Juan del Norte, Nicaragua, February 7, 1898.

His Excellency JOSÉ C. MUÑOZ,
Ministro de Fomento, Managua.

SIR: I have the honor to transmit herewith a partial translation of the Executive order of October 9, 1897, for the establishment of a national museum at Managua.

I purpose sending this translation to my Government, that it may be made public in the United States, and also that those who may wish to lend their assistance and cooperation may thus acquire the necessary information upon the subject to enable them to do so.

I would be very much gratified if the scope of the enterprise could be enlarged and broadened so as to admit of the participation and cooperation of foreign merchants and manufacturers.

If a special department, sufficiently large, comprehensive, and commodious, were assigned for the purpose, and the importation and exportation of the articles and objects for exhibition made free from import and export duties and local taxation and dues, I am confident that a large number of American manufacturers and merchants will gladly cooperate, and that their participation alone will be so earnest and practical that a most successful and creditable exhibit will be assured. Almost every branch of our manufacturing industry would be represented by specimens and samples, with price lists and descriptive catalogues; and I am sure the exhibit would be mutually instructive, interesting, and profitable to the people of Nicaragua and the manufacturers of the United States.

I would respectfully suggest that for the management of this department the services of an active, intelligent, attentive, practical man, thoroughly conversant with commercial matters, would be essential. Such a man would soon be able to earn a large salary in commissions on the orders he would receive.

Nicaragua is a new and undeveloped country; but her wonderfully rich soil, matchless climate, and singularly beautiful and grand scenery; her marvelous natural wealth in minerals and forests; her prodigious possibilities in agriculture and horticulture; her superior live stock advantages; her splendid, though neglected, water power, and her navigable rivers and lakes—to say nothing of her canal and railway probabilities—all are beyond proper conception and inspire interest and admiration.

Your museum is distinctly a step in the right direction, and in wishing you every success, I also offer my services.

With the assurances of my highest consideration, I am your obedient servant,

WILLIAM B. SORSBY,
U. S. Consul.

MERCHANT MARINE IN THE NETHERLANDS.

I have the honor to submit the following report on the growth of the Dutch merchant marine during the year 1897. I am indebted to the publishers of the Scheepvaart, a paper devoted to marine matters, for many of the statistics contained therein.

The year 1897 has been favorable for the merchant marine. The large steamship companies, led by the Holland-America Line, have strengthened their fleets with new and larger steamships. The steamship *Rotterdam* (8,301 tons), of the Holland-America Line (ordered in Belfast, Ireland, in November, 1895), entered the services of the company between Rotterdam and New York during the past summer. The steamship *Statendam* (10,400 tons), ordered in November, 1896, is nearing completion and will probably make its first trip in June, 1898. The building of a new steamer, the *Rijndam* (12,000 tons), was started in November, 1897.

The Steam Navigation Company Nederland (running steamers between the Netherlands and the Dutch East Indies) ordered in November, 1896, the steamship *Madura* (3,250 tons), which started on her first trip to the Indies on January 12 of this year. During the past year the above-mentioned company also closed a contract for the building of the mail steamer *Koning Willem I* with a shipbuilding company at Flushing.

This company dismantled one ship and sold one during the year, and added to its fleet, besides the boat already mentioned, two steamers built at Newcastle-on-Tyne. A small double-screw steamer is also in course of construction.

The Rotterdam Lloyd has ordered a freight steamer of 5,000 tons from Hamburg. One boat was lost during the year and one dismantled.

The Royal Netherlands Steamship Company has ordered three new boats at Rotterdam, having lost two during 1897. The Royal West Indian Mail Service has a new boat of 1,750 tons. The Netherlands Ocean Steamship Company sold two ships and bought two of slightly increased tonnage. The Government of the Dutch West Indies began running a second steamer, which was built in England. The Petroleum Development Company is running two additional boats and has ordered another. The Holland Steamship Company lost a vessel during the year, which has not yet been replaced. The fleet of the Netherlands Steamship Company was increased by two new boats, each of 1,140 tons, built in England.

The number of general freight steamers also increased. New companies were started, together representing a capital of $814,000. The fleet of large sailing vessels decreased; but two were launched during the year, one of 3,000 tons and one of 2,560 tons.

It will be seen that the year 1897 was important for the merchant marine of the Netherlands. After many years of decline in the shipping interests, progress can be observed.

S. LISTOE,
Consul.

ROTTERDAM, *February 8, 1898.*

COMMERCIAL HIGH SCHOOL AT LEIPSIC.

In a former report* an account was given of a proposed State commercial high school for Magdeburg. The plan to establish it at that city has been abandoned, and it has now been decided to inaugurate it the coming Easter at Leipsic. The conditions governing admission have now been made public. Candidates for matriculation must have pursued one of the courses, or have the qualifications hereunder specified:

(1) Graduates of nine graded higher schools (Gymnasia, Real Gymnasia, and Ober Realschule).

(2) Merchants who have received the certificate of the one-year volunteer military service and who have successfully completed their school period.

(3) Graduates of German teachers' seminaries who have passed the qualifying examination ("second teachers' examination").

(4) Foreigners who establish proof of a corresponding education and who are over 20 years of age.

The last two points were not definitely decided upon at the commercial high school conference at Hanover. Up to the present, entrance examinations have not been considered. Students of the University of Leipsic, merchants, teachers, etc., may attend certain lectures. As to the admission of students of the commercial high school to the university lectures, no agreement has as yet been made with the authorities.

A seminary for training teachers for the commercial high school will be established, to which students of the University of Leipsic, as well as other educated candidates for commercial high-school teacherships (including teachers and merchants of at least six years' experience, who have received a seminary education and who have the right to one-year volunteer military service), will be admitted. In view of the great need of commercial teachers, this plan meets with great approval.

THOS. EWING MOORE,
Commercial Agent.

WEIMAR, *February 22, 1898.*

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* See CONSULAR REPORTS No. 209 (February, 1898), p. 171.

TELEPHONE STATISTICS OF EUROPE.

In no department of industry is Germany more active than in electrical appliances. To our people, certainly the equal of any nation in this line, the following statistics will prove interesting. The list leaves out Norway, Denmark, Finland, Great Britain, and Portugal, because these people put down no answers to the cards of inquiry. Turkey and Greece have no telephones.

Country.	Number of lines.	Instruments.	Inhabitants to each telephone.
Sweden	293	42,354	115
Switzerland	295	23,446	129
Luxemburg	57	1,356	160
Germany	534	131,577	397
Holland	31	7,900	615
Belgium	15	9,400	682
France	407	31,681	1,216
Austria	124	18,950	1,318
Spain	48	10,810	1,597
Hungary	36	8,458	2,168
Italy	54	11,815	2,629
Russia	53	16,050	6,988
Bulgaria	5	243	13,616
Roumania	6	337	16,042

If these States continue to improve their telegraphic and telephonic connections in the next decade as they have in the last, an enormous amount of wire and instruments of all kinds are sure to be demanded.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *February 20, 1898.*

AMERICAN MACHINERY IN GERMANY.

For the benefit of American manufacturers of machinery, I give below some complaints that have reached me from dealers and purchasers in Dresden.

PACKING.

Heavy machines have been received loosely or insecurely packed in fragile cases, allowing them to move and punch holes in the boxes. It often happens that parts of machinery easily broken or bent protrude from the sides or ends of cases, and these are almost invariably damaged in transit.

Polished parts of machinery should be thoroughly "doped" to prevent rust that will occur during a long ocean voyage unless properly protected.

Machinery is sometimes packed in cases so tightly put together with nails as to cause trouble and expense in opening at the custom-houses, and frequently the boxes are entirely destroyed in the operation. While good and secure packing is desirable, there is a happy medium.

CARELESS INSPECTION.

Imperfect machines are sometimes received, requiring a portion or the whole replaced. This entails a delay of one to three months, and is most provoking to a man who needs the use of the machine and has purchased in good faith.

INVOICES, BILLS OF LADING, INSTRUCTIONS, CIRCULARS.

Sometimes shipments from America reach here before the invoices and bills of lading, without which the purchaser is unable to obtain the property. There is no excuse for this.

Full instructions for setting up and operating machinery should always be sent. What may seem very simple to an inventor or manufacturer is often puzzling to a person not familiar with a machine or its operation.

It is simply a waste of time and money to send circulars printed in English. A circular should be plain and attractive, and, unless printed in German, will receive no attention in this district.

GENERAL REMARKS.

Net and shipping weights should be quoted. Prices at some inland city are often quoted, instead of the price free on board at New York or other port. A purchaser can usually determine the transportation cost from an American seaport to destination, but he has no means of learning the cost of railroad transportation, and, when local rates are exacted, it adds materially to the cost of the property at destination.

The charge for boxing is often quoted "at cost," instead of stating the amount.

Manufacturers intending to "work" this market should, I think, employ means of ascertaining the integrity and financial ability of parties with whom they deal. Demanding cash on order bills of lading from government railways or arsenals, and from established firms of undoubted standing, is provoking and is calculated to make these parties look elsewhere for supplies.

Some agents complain that manufacturers fail to patent their machines, and, after a demand for them has been built up, they find the article is being manufactured here. Too much care can not be exercised in this direction.

Some American manufacturers reply to inquiries for prices by stating, "We are represented in your district," without saying where their agents can be found.

Care should be taken to plainly address all letters and circulars sent by mail. Employees of the postal service can not usually read English, and at best are working under difficulties that should be made as easy as possible. Letters and circulars should have postage fully paid by attaching the necessary stamps. When the postage is but partially paid, letters are subject to delay in delivery, and, besides, when writing on your own business, it is scarcely fair to subject the recipient to this tax.

CHARLES L. COLE,
Consul-General.

DRESDEN, *February 28, 1898.*

OPENING FOR AMERICAN PRODUCTS IN FRANCE.

The city of Nantes is a great trade center. The consular district, from Tours to St. Nazaire and along the coast to Brest, contains many good-sized towns and cities, which can be reached both by water and rail. American productions are but little known, and it seems to me that by energetic effort a good market could be opened.

Common washboards are not known. Washing is done entirely by hand, and the ordinary washing machine of America is unheard of. No laundry machinery seems to be used, except an occasional wringer which is clumsy and awkward in construction and very expensive. Rocking-chairs are not used. In place of American hand and crosscut saws, mechanics and laborers here use what is commonly known as the buck saw. Hatchets are of a crude design, as are also carpenters' squares. Tubular lanterns are brought from England and sell for 10 francs ($1.93) apiece. The ordinary tubular lantern used in the United States and sold for about 2 francs (38 cents) would answer the same purpose. I also think that moderate-priced iron beds would find a market. Single ones sell here for from 60 to 120 francs ($11.58 to $23.16) and are furnished with a very cheap grade of springs. Brass bedsteads, three-fourths size, furnished with good springs, mattresses, and pillows, sell for nearly 400 francs ($77.20). Chewing gum is unknown.

Apples, sliced and dried without removing the seeds or skins, find a good market. Many of them come from California and are sold at a profit. The Eastern and Middle States could certainly ship such fruit by slow freight via St. Nazaire at a good advantage.

Among the American productions known here are Singer and Home sewing machines, prunes and apricots from California, Carolina rice, and petroleum.

The French people would, I think, willingly buy more of our products if they knew anything about them. Several French dealers have called at this consulate lately, seeking information as to our prices and productions.

JOSEPH I. BRITTAIN,
Consul.

NANTES, *February 24, 1898.*

LARD AND BACON IN DENMARK.

I inclose a translation of a bill referring to the sale of foreign lard and bacon in Denmark recently brought into the Danish Diet. As it is likely to become law, it may interest American lard and bacon exporters.

SECTION 1. Lard (including fat), bacon, and sausages imported from abroad for sale in the Kingdom shall, before being exposed for sale in large or small quantities, be provided with labels or similar marks or indications which clearly prove that the goods came from abroad and show the country of origin.

SEC. 2. The same rule is applicable to every article of human food which is produced by transformation of, or manufacture or mixture with, foreign lard or bacon.

SEC. 3. Fines from 25 to 2,000 kroner ($6.70 to $536) are imposed for infringement of this law; on repetition of the offense, the fine can, under aggravating cirstances, be increased to imprisonment.

No punishment, however, can be applied to the person who proves that he has received the goods from a person living in the Kingdom when it can be believed that he was unaware of their origin. The person who, for consumption and sale in the Kingdom, has sold goods of the kind mentioned in sections 1 and 2, and on which, or the labels or the cases, the origin was not stated at the time of the sale, in the manner indicated in section 1, shall (when the buyer at the time of purchase was not informed of the origin of the goods) be compelled to take the goods back and refund the money; and, also, if he is not through the sale liable to a fine according to the above-named provisions of the law, shall indemnify the buyer for any proven loss, in accordance with the usual legal regulations.

SEC. 4. Inspection of the matters covered by this law shall be made by the margarin inspectors, who shall have free access to every store, storage, or factory, where goods or preparations thereof, as mentioned in sections 1 and 2, are exhibited for sale, stored or manufactured; and the inspectors shall have the right to take samples at ruling prices.

In every store where goods mentioned in sections 1 and 2 are exhibited for sale, the Minister of Agriculture shall, according to rules hereafter to be prescribed, cause a notice, bearing letters 3 inches large, to be put up in a conspicuous place.

Unwarranted refusal to admit the inspectors to the stores or goods and to deliver samples, and omission to have the above-named declaration exhibited, is punished with fines from 50 to 500 kroner ($13.40 to $134).

SEC. 5. Cases for punishment, in accordance with this law, are dealt with by the police authorities; experts shall be summoned if the matter requires it, and always if the accused demands it.

Civil disputes, in which claims are made in accordance with the terms of this law, are dealt with by the commercial court.

SEC. 6. This law takes effect three months after being published in the Danish Law Journal.

JULES BLOM,
Vice and Deputy Consul.

COPENHAGEN, *March 11, 1898.*

HORSE MEAT IN EUROPE.

The following is receiving considerable attention just now from the Swiss press:

> An American horse-meat company has been organized in Kearny, N. Y., whose object is to prepare horse meat for the European market in the form of sugar-cured horse hams, smoked horse tenderloins, pickled horse ribs, and salted horse flesh. This meat will be sent in boxes marked distinctly "horse meat," and each shipment is to be carefully inspected and accompanied by a certificate that it is pure horse meat and in a wholesome condition.

I can not find any town by the name of Kearny in the State of New York, and the item looks like one of the kind that the European journals, jealous of American trade, take pleasure in circulating.

But whether there is truth in this report or not, there is certainly a demand for good, wholesome horse meat in some of the markets of Europe. In many towns are to be found well-stocked markets where nothing but horse meat is sold—fresh, salted, smoked, and in sausage form. The prices range from 5 to 8 cents per pound, according to cut, and a large amount of this meat is purchased by the poorer classes. The horses used are old ones or those killed by accident. The people who buy this meat claim that they prefer it to the tough cow meat that is sold for from 8 to 12 cents a pound. It is sweeter, more tender, and quite as wholesome, according to their statements. The shops where horse meat is sold always have a "horse-meat market" sign conspicuously displayed, so that no deception is possible. If the purchaser buys horse meat and eats it, he does so knowingly. In this respect the municipal inspection is very thorough; a butcher licensed to sell beef, if found selling horse meat, would be severely and promptly punished.

JAMES T. DUBOIS,
Consul-General.

ST. GALL, *February 24, 1898.*

THE FLOUR TRADE IN GIBRALTAR.

In continuation of my report under date of the 4th instant, regarding American flour in Gibraltar,* I have to state that this market continues to depend chiefly upon United States supplies to meet the actual demand for fresh bread for the civil population and the shipping arriving at this port.

The formidable British Channel fleet has lately arrived. Besides being supplied with fresh bread from the military bakery in this fortress, the naval authorities have entered into a contract with private parties here for a supplemental supply of 4,000 pounds of bread daily, and more if required. It is understood that the price agreed upon is about 22 Spanish centavos per English pound, which is equal to about 4¼ cents in American currency.

This contract, as long as it lasts, will assist in consuming considerable of the stock of American flour remaining unsold, and be the means of keeping the prices firm. The importations from New York since the beginning of the year have been 16,934 sacks.

The condition of the growing crops of cereals in this immediate neighborhood is considered excellent.

HORATIO J. SPRAGUE,
Consul.

GIBRALTAR, *February 26, 1898.*

UNITED STATES VERSUS CANADIAN CHEESE IN ENGLAND.

Consul Dickinson writes from Nottingham, under date of January 26, 1898:

I inclose an extract from the London Times of January 24, 1898, showing annual importations of cheese into the United Kingdom from the year 1894 to 1897, inclusive; also, a table giving the different countries from which the supply is obtained and quantities shipped from each.

Noting the discrepancy as between 58 per cent from Canada and 24 per cent from the United States, I am advised by dealers that this has been wholly brought about by American shippers who persisted in sending to this market a product known as "filled" cheese. "American cheese," to a very considerable extent, is therefore under a ban in this country.

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* See CONSULAR REPORTS, No. 211 (April, 1898), p. 504.

EXTRACT FROM THE LONDON TIMES, JANUARY 24, 1898.

Annual imports of cheese into the United Kingdom, 1894–1897.

From—	1894.	1895.	1896.	1897.
	Cwts.	*Cwts.*	*Cwts.*	*Cwts.*
Canada	1,142,104	1,150,018	1,234,297	1,526,664
United States	672,347	500,419	581,187	631,616
Holland	298,693	305,920	292,988	297,559
Australasia	54,378	92,759	55,149	69,090
France	52,969	56,393	45,676	36,358
Other countries	45,654	28,310	35,238	42,321
Total	2,266,145	2,133,819	2,244,535	2,603,608
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*
Canada	50.4	53.9	55	58.6
United States	29.7	23.4	25.9	24.3
Holland	13.2	14.3	13	11.4
Australasia	2.4	4.4	2.5	2.7
France	2.3	2.7	2	1.4
Other countries	2	1.3	1.6	1.6
Total	100	100	100	100

* * * * * * *

In 1894 Canada and the United States together sent us 80.1 per cent of our imported cheese, and three years later the quantity was 82.9 per cent; so that, roughly speaking, it may be said that we got four-fifths of our imported cheese from North America. But, whereas in 1893 Canada sent us 50.4 per cent and the United States 29.7 per cent of the total, in 1897 Canada's contribution had risen to 58.6 per cent, while that of the United States had fallen to 24.3 per cent. Practically, therefore, what the United States has lost Canada has gained.

A copy of Consul Dickinson's report was sent to the Department of Agriculture, with a request for an explanation of the alleged exports of "filled cheese" from the United States to England. The following statement, bearing date of March 11, 1898, has been prepared by the Dairy Division, Bureau of Animal Industry:

EXPORTS OF CHEESE FROM THE UNITED STATES.

From the beginning of the nineteenth century, exports of cheese from the United States increased year after year with no fluctuation of consequence, and, as partly shown by the following table, until the maximum of 148,000,000 pounds was reached in 1881. This was more than half the total product of the country. Nearly all of these exports went to Great Britain, and the quality of the article steadily improved until cheese from the United States stood at the head in the English market.

Beginning between 1881 and 1885 a change took place, and cheese exports from the United States to the United Kingdom decreased gradually for fifteen years. This decline was accounted for partly by a remarkably rapid growth in the cheese industry of Canada, fostered by extraordinary aid and encouragement on the part of the Dominion Government, and partly, during the later years, by a loss of reputation sustained by United States cheese, owing to the exportation from this country, by unscrupulous dealers, of much low-grade cheese and the adulterated or counterfeit article known as "filled cheese."

The evil of unidentified filled cheese became so great, at home and abroad, that the Congress of the United States enacted a law in June, 1896, regulating the manufacture and sale of the article. This act is now so well enforced that the output of filled cheese has been greatly reduced. The product is well identified, and, although some is still exported, it leaves the ports of the United States under such form and markings that purchasers can not be deceived as to its true character. What becomes of it later, and how it is offered to consumers, are points beyond the control of the exporting country.

The filled-cheese frauds at home have been practically terminated, and the reputation of genuine cheese from the United States has been improving of late. This is indicated by the increase of exports shown in the table. The figures are for the fiscal years ending with June. A better illustration of the improved condition of the export trade in cheese is shown by the returns for the calendar years of 1896 and 1897:

Year.	Total cheese exported.	To the United Kingdom.
	Pounds.	*Pounds.*
1896	44,530,234	36,297,922
1897	60,181,651	44,350,228

The foreign cheese trade of the United States is thus seen to be now increasing, and it may be also noted that Great Britain takes three-fourths of all exported from this country.

Exports of cheese from the United States for single years and yearly averages for five-year periods.

Year.	Quantity.	Year.	Quantity.
	Pounds.		*Pounds.*
1850	10,361,189	1881–1885	118,813,685
1860	15,515,799	1886–1890	88,303,513
1861–1865	35,081,855	1891–1895	75,977,115
1866–1870	47,423,602	1895	60,448,421
1871–1875	90,688,546	1896	36,777,291
1876–1880	113,606,609	1897	50,944,617

According to British official statistics, the imports of cheese into the United Kingdom from Canada and the United States were as follows during the calendar year 1896: From Canada, 138,241,264 pounds, valued at $12,600,822.32, or 9.12 cents per pound; from the United States, 65,092,944 pounds, valued at $6,005,441.06, or 9.23 cents per pound, showing that the quality of the American cheese was superior to that of Canada.

PACKING CREAMERY BUTTER IN CANADA.

Weekly consignments of creamery butter are being exported from this district at present to commission brokers in Manchester and other English cities. The butter is being put up in new pine boxes, nearly square and lined with oiled paper, each box containing 56 pounds. These boxes are constructed about three-fourths of an inch wider all around at the top (which is screwed on), in order to permit the contents being easily shaken therefrom by the consignees, who weigh nothing but the butter. The weight of the contents of the lightest box in each consignment is taken as the average weight per box of the whole. Thus, great care is necessary, in order that the full quantity shall be packed therein. Coverings of bagging, opened at the top and gathered with a stout string, are made for each box, to keep the packages perfectly clean for ultimate distribution. The latest return for the product, to the shipper here, is 19.88 cents per pound. English dealers are insisting upon every particular of the foregoing details being carried out. In pursuance of recent legislation, boxes are all marked with the name of the maker and the number of factory; and the bagging is marked with the initials of the maker, Government number, and country of production.

LOTON S. HUNT,
Consul.

PALMERSTON, *March 24, 1898.*

PROHIBITION OF NURSERY STOCK IN CANADA.

Attention is being directed to a bill introduced by Mr. Fisher, the Minister of Agriculture of the Dominion, in the Canadian Parliament, prohibiting the importation of nursery stock into Canada from countries where the insect pest called the San José scale is prevalent.

In explaining the bill, the minister stated that he was urged last summer to take steps to prohibit the importation of nursery stock from the United States, where this pest had spread to an alarming extent. In fact, the only State in the neighborhood of Canada now free from the pest is Maine. The insect doing the damage is microscopic in its nature.

The bill, he said, proposed the absolute prohibition of nursery stock from countries where the pest now exists, namely, the United States, Japan, and Hawaii. Representations from all fruit-growing sections of Canada had been made in favor of this prohibition. The matter had been thoroughly investigated, and the result was the present bill, which he asked the house to pass without delay, so as to stop the spring importation from the United States. He would therefore ask that the rules be suspended and the bill passed. Inspection, as some had suggested, would be impossible and useless. He did not believe in restrictive legislation generally, but he believed in protection of local industries in a case like this.

He also pointed out that action was being taken by the provincial authorities, but that it remained for the Federal Parliament to assist by prohibiting dangerous nursery stock. The insect pest is one that can of itself travel but a few inches, and can live only upon the bark of the tree. There is very little danger to be feared from the importation of fruit.

The bill then passed both houses and went into effect immediately.

There are a number of importers of nursery stock in my district who have already placed orders for spring importations, and to whom the new regulation will cause great loss and inconvenience.

GUSTAVE BEUTELSPACHER,
Commercial Agent.

MONCTON, *March 21, 1898.*

Consul Sewell sends from Toronto, under date of March 22, 1898, the following copy of the law to prohibit the importation of nursery stock into Canada.

61 VICTORIA.—AN ACT TO PROTECT CANADA AGAINST THE INTRODUCTION OF THE INSECT PEST KNOWN AS THE SAN JOSÉ SCALE.

[Assented to March 18, 1898.]

Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:

1. This act may be cited as the San José scale act.

2. The importation of any trees, shrubs, plants, vines, grafts, cuttings, or buds, commonly called nursery stock, from any country or place to which this act applies is prohibited.

3. Any nursery stock so imported shall be forfeited to the Crown and may be destroyed, and any person importing nursery stock from any such country or place, or causing or permitting it to be so imported, shall be deemed to be guilty of an offense under section 6 of the customs tariff, 1897, and shall be liable to the penalty prescribed by that section.

4. The Governor in council may from time to time declare that this act applies to any country or place as to which it has been made to appear that San José scale exists therein; and, when satisfied that the importation of nursery stock from any country or place to which this act has been applied may safely be permitted, he may in like manner declare that this act no longer applies to such country or place.

5. The Governor in council, upon its being made to appear to his satisfaction

that any class of plants is not liable to the attack of the San José scale, may exempt plants of such class, and grafts, cuttings, or buds thereof, from the operation of this act.

6. The Governor in council may from time to time, notwithstanding anything contained in this act, permit the importation from any country or place to which this act applies of such nursery stock as is required for scientific purposes.

7. All orders in council made under sections 4 and 5 of this act shall be published in the Canada Gazette.

ORDERS IN COUNCIL.

AT THE GOVERNMENT HOUSE AT OTTAWA,
Friday, the 18th day of March, 1898.

Present: His Excellency the Governor-General in council.

His Excellency, in virtue of the provisions of section 4 of the act passed during the present session of Parliament, cited as "the San José scale act," and by and with the advice of the Queen's Privy Council for Canada, is pleased to declare that the United States of America, Australia, Japan, and the Hawaiian Islands shall be, and the same are hereby, declared to be countries to which this act applies, owing to the existence of the San José scale in them.

JOHN J. MCGEE,
Clerk of the Privy Council.

AT THE GOVERNMENT HOUSE AT OTTAWA,
Friday, the 18th day of March, 1898.

Present: His Excellency the Governor-General in council.

His Excellency, in virtue of the provisions of section 5 of the act passed during the present session of Parliament, and cited as "the San José scale act," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order and declare that the following plants which are not liable to the attack of the San José scale, viz:

(1) Greenhouse plants with the exception of roses,
(2) Herbaceous perennials,
(3) Herbaceous bedding plants
(4) All conifers,
(6) Bulbs and tubers—

shall be, and the same are hereby, exempted from the operations of the abovementioned act.

JOHN J. MCGEE,
Clerk of the Privy Council.

NEWFOUNDLAND PORT REGULATIONS.

I inclose a copy of a circular sent to officers of customs and others throughout the colony of Newfoundland. I have been informed by the assistant collector of customs that in future vessels coming from the United States must enter and clear at a port of entry in the colony, and must have a clearance from the port in the United States at which they last touched.

MARTIN J. CARTER,
ST. JOHN'S, *March 25, 1898.* *Consul.*

CUSTOMS CIRCULAR.

Under the treaty of 1818, made between Great Britain and the United States, the fishermen of the latter country have liberty to catch fish on that part of the coast between Ramea Islands and Cape Ray and between Cape Ray and Quirpon Islands, and of drying or curing fish in any unsettled parts within those limits. They may not, however, enter any settled parts in this colony within the above limits, or any parts without those limits, for any purpose other than for the purpose of shelter, and of repairing any damage, or of purchasing wood and of obtaining water; except for taking fish within the above limits.

Under the 'foreign fishing-vessels act," 55 Vic., cap. 10, fishing vessels of the United States are permitted to obtain a license to enter any port of this colony for the purpose of purchasing bait, ice, seines, lines, and all other supplies and outfits for the fishery and for the shipping of crews.

You are to see that every fishing vessel of the United States which enters your port or any port within your jurisdiction, except it be within the above limits, for other than the purpose of shelter, repairing damage, and of purchasing wood, and of obtaining water, shall obtain a license as set forth in the "foreign fishing-vessels act," and shall pay for the same the fee of $1.50 per registered ton; but if the port be within the above limits, she may enter to take (catch) fish without a license, as well as for the above purposes, but not to buy fish or carry on trade, or for any purpose not above mentioned.

You are prohibited from issuing to any foreign fishing vessel a license, if such vessel has on board dutiable goods that may be sold or otherwise disposed of in trade.

Every fishing vessel of the United States which enters your port, or any port within your jurisdiction, having on board goods which may be sold or otherwise disposed of by way of trade, must be promptly reported to the assistant collector. When reporting, give full particulars as to name of vessel, tonnage, port of registry. master's name, number of crew, and the kinds and quantity of dutiable goods on board such vessel which may be sold or disposed of in trade. Ship's stores are to be treated as such, and shall not be landed or disposed of by way of trade; but if the quantity of liquor or tobacco on board such vessel be large, a portion may be considered as not being ship's stores, and in this respect you must use your own discretion.

Vessels of the United States resorting to the herring fishing centers during the fall and winter herring fishery must enter and clear at a port of entry in this colony, and will not be permitted to enter without producing a clearance obtained from the port in the United States which they last left before entering any port in this colony. A license only permits fishing vessels to obtain bait and not cargoes of herring for export, and fishing vessels having a license only will not hereafter be permitted to purchase herring for export.

H. W. LEMESSURIER,
Assistant Collector.

CUSTOM-HOUSE,
St. John's, Newfoundland, March 18, 1898.

NEW TRADE REGULATIONS IN CHINA.

Minister Denby sends from Peking, under date of February 15, 1898, a translation of a communication from the Tsungli Yâmen, to the effect that goods sent inland under transit passes may be sold en route, according to new customs regulations. The letter reads:

PEKING, *February 11, 1898.*

YOUR EXCELLENCY: Upon the 17th of December, 1897, and the 11th of January last, the Yâmen received two communications from Baron Heyking, the minister for Germany, inquiring as to whether goods imported by foreign merchants in transit inland could be sold en route, as it was a matter which greatly concerned the trading interests of both Chinese and foreigners, and requesting that the various likin authorities should be instructed not to interfere with sales of imports en route inland.

The Yâmen, at the time, referred the question to the Inspector-General of Customs for his careful consideration and to devise some means of dealing with it. On the 28th of December last, the Inspector-General of Customs reported as follows:

By Article VII of the rules of trade.—"In the case of imports: Notice being given at the port of entry, from which the imports are to be forwarded inland, of the nature and quantity of the goods, the ship from which they have been landed, and the place inland to which they are bound, with all other necessary particulars, the collector of customs will, on due inspection made and on receipt of the transit duty due, issue a transit-duty certificate. This must be produced at every barrier station and visaed. No further duty will be leviable upon imports so certificated, no matter how distant the place of their destination. * * * Any attempt to pass goods inwards or outwards * * * will render them liable to confiscation. * * * Any attempt to pass goods in excess of the quantity specified in the certificate will render all the goods of the same denomination named in the certificate liable to confiscation." The treaties, therefore, provide that the destination of all goods inland must be reported to the customs. It is known, therefore, that the issue of transit certificates by the customs is to cover goods from a treaty port to a place inland, so as to avoid the levying of further duty. These certificates must be produced at every barrier station and visaed, and no further duty will be leviable upon goods so certificated, no matter how distant the place of their destination.

It is further stipulated that any attempt to pass goods inwards or outwards * * * will render them liable to confiscation. It is evident that when the treaties were made it was not contemplated that goods going inland were to be sold at places en route; and the tariff rules merely provide that goods could be sent from a treaty port to a specified place inland, and that no further duty should be levied on them.

Such being the stipulations of the treaty, imports covered by inland certificates are free from paying any further duty from the treaty port to the inland place specified. The certificate, however, is to be canceled at the inland place specified therein, and, on being canceled, the goods are then placed on the same footing as uncertificated goods and subject to inland regulations.

The above rules are in accordance with the meaning and spirit of the treaties, and hitherto have been carried out by the customs.

But, having received the Yâmen's instructions setting forth the representations made by Baron Heyking, German minister, the Inspector-General considers that some plan of action must be devised to meet the case presented. He suggests the following:

Certificated goods from a treaty port to an inland place duly specified shall be free from the payment of further duty. On arrival of the goods at the place of destination, the certificate shall be canceled. If the entire quantity of goods so certificated are sold en route, then the certificate must be canceled at the barrier near where the goods were sold. Should, however, the entire quantity of goods certificated not be sold, but only a portion, on the balance reaching the first barrier, the quantity and kind of goods sold and the place where sold must be reported by the merchant to the likin officers, who will make an indorsement on the certificate under seal of office, and the goods will be allowed to pass.

Stringent instructions must be issued to the officers of all the first barrier stations that they must not receive certificates, duly stamped by them, to pass goods a second time. If, on examination, it be found that such certificates are being used by merchants, the goods specified in them will be confiscated.

The above rule, it would seem, will protect the revenue; and to allow merchants to sell goods en route will be an aid and benefit to their interests.

The Yâmen would observe that when foreign merchants apply for transit passes to cover imports into the interior, the passes are canceled on the goods reaching the place of destination.

The request made regarding Baron Heyking's communication, that hereafter imports may be allowed to be sold en route, has for its object the interests of trade. China, having in view the desire to cultivate friendly relations with foreign powers, and the question presented being one that will benefit trading interests and not cause the likin revenue to suffer, has considered the matter and decided to carry into effect the proposal of the Inspector-General of Customs.

The Yâmen have addressed the minister superintendent of northern and southern trade, and the tartar-generals, viceroys, and governors of the provinces, to instruct all the likin offices and barrier stations to conform to this new rule.

The princes and ministers would ask the minister of the United States to instruct the United States consul to notify American merchants that in future they may sell imports certificated for an inland place en route, in accordance with the new regulations.

PATENT RIGHTS IN CHINA.

Under date of February 5, 1898, Minister Denby sends from Peking the following copy of a letter to a correspondent asking for information in regard to patents in China:

LEGATION OF THE UNITED STATES,
Peking, February 5, 1898.

DEAR SIR: I have received your letter of December 20, wherein you ask me to advise you as to what would be necessary in order to file or record a railroad device in the patent office of China.

In answer thereto, I have to state that there is no patent office in China. There is no prohibition against the introduction of patented articles in this country.

With regard to copyright, trade-marks, and patents, there are no treaties between the United States and China. Should disputes relating thereto arise between American citizens in China, they would be tried before the American consuls and decided according to the law of the United States. A patent held valid in the United States would be so held in China in all cases in which Americans are interested.

With regard to native Chinese, they stand in all these matters in the same relation to American citizens as the inhabitants of any foreign country. The international recognition of rights to patents, trade-marks, etc., depends entirely on treaties. In the absence of such treaties, there is nothing to prevent American books being reprinted, American trade-marks copied, and native produce sold under them and American patented goods reproduced by native workmen. The native laws, however, give remedies for fraudulent representation or obtaining money under false pretenses. I have on several occasions applied to the Chinese Government to furnish protection against the fraudulent use of American trade-marks. In each case energetic action has been taken by the local magistrates, and the perpetrators of the frauds have been punished and damages assessed.

Beyond such preventive action, I do not see how under existing treaties and laws the Government of China can do anything.

As between Americans and foreigners, these rights in China would depend on any treaties which the respective governments may have entered into regulating the protection to be afforded by their respective countries.

There is no objection to your selling to any railroad company the right to use your patent. Should the patent be afterwards used by any other person without the right having been granted by you, you should appeal to your consul for redress. He would, if necessary, bring the matter to the attention of the legation.

MATCH INDUSTRY IN JAPAN.

Consul-General Gowey sends from Yokohama, under date of February 25, 1898, the following clipping:

KOBÉ INDUSTRY.

[From the Japan Herald of February 14, 1898.]

The match industry at Kobé was first started in 1878, when a man named Hori established a factory at Shimoyamate-dori, where a small quantity was manufactured for home consumption. This was followed by other factories, but their output was merely for home consumption until in 1879, when the first export was made to Shanghai; and from that time until 1883 more than a dozen persons were engaged in the industry. Owing, however, to insufficient experience in the manufacture and to the unsatisfactory means taken in order to effect sales, there were many who lost a great deal and abandoned the manufacture in disgust. Many Chinese manufacturers exported inferior articles with only immediate profit in view, the consequence being that exports valued at 240,000 yen in 1881 declined to less than 1,000 yen in 1884. The manufacturers having been awakened to a sense of these deplorable conditions, measures for the recovery of credit were studied and the quality of the manufacture improved, with the result that new outlets were found in Hongkong and other places. For a year or two after 1885, the industry greatly prospered; but, owing to the abuse of inferior manufacture and to the difficulties arising from imitations of trade-marks by Chinese, the industry again declined in 1889, and the quotation fell. Measures for the suppression of these abuses were then taken, including the inspection of matches for export, and a considerable export trade was again developed. At present, the principal places to which exports are sent are Hongkong, India, Singapore, Siam, Rangoon, and Sydney; and there is a prospect of trade being opened with England and Germany before long. The following are the returns for the last five years:

Year.	Value.		Price per 600 dozen.	
	Yen.		*Yen.*	*Cents.*
1893	2,036,218	$1,292,998	1.35	86
1894	2,118,487	1,084,665	1.35	69
1895	2,883,905	152,849	1.45	73
1896	3,156,219	1,672,796	1.52	81
1897	3,413,224	1,706,612	1.55	78

There are now forty-five factories, of which four turn out over 5,000 cases of 6,000 dozen each per annum. The number of operatives employed in the industry is 11,000, of whom 4,680 are males and 6,320 females; while the number directly employed by manufacturers is 8,890, on an average, per diem. The wages of operatives employed is 15, 25, and 40 sen* on an average, while boys from 10 years upwards receive from 2½ to 15 sen per day.

PRINCIPAL MATCH FACTORIES IN JAPAN.

At the request of a chemical company of St. Louis,† Consul-General Gowey gives the following information under date of Yokohama, March 4, 1898:

TOKYO CITY.

Eisei Kabushiki Kaisha (company), Shinsakai cho, Kiobashi Ku.

OSAKA CITY.

Seirin Kan, Tennoji Mura, Higashi Narigori.
Osaka Seisui Kabushiki Kaisha (company).
Shosei gumi, Tamatsukuri machi.
Nislumura Match Factory, Tsurubashi Mura.
Sinagawa Match Factory, Noda Mura.
Koeki Sha, Namba Mura, Nislunarigori.
Slioju Kan.
Sanko Sha, Kujo Mura.
Abe Match Factory.
Meisei Kan, Noda Mura.
Kajuvara Workshop, Hiejima Mura.
Nagai Factory, Fukushima Mura.
Fukuda Match Place, Nishi Nakashima Mura.
Nissei Sha, Toyosaki Mura.
Nanyo Sha, Kishiwada Mura, Minamigori.
Meisui Sha, Umemoto cho Nishi Ku.

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* 1 sen equals half a cent.

† ADVANCE SHEETS of the report have been sent to the inquirer.

HIOGO KEN.

Toka Kan, Fukiai Mura, Kobé City.
Koeki Sha.
Riosui Sha, Matsubara dori.
Kaiei Kabushiki Kaisha (company), Daikai dori.
Meiji Sha, Minato cho.
Seisui Sha.
Second Meiji Kabuhiki Kaisha (company).
Shoko Sha, Arada cho.
Takikawa Gomei Kaisha (company), Midzuki dori.
Yoshino Kan, Fukiai Mura.
Shinsui Sha, Irie dori.
Sosho Sha, Mikawaguchi Machi.
Sakamoto Kan, Tochibana dori, Rokuchome.
Koei Kan, Okuhirano Mura.
Meiko Sha, Higashi Kawasaki cho.
Suiho Taishi Sho, Amagasaki Machi Kawabegori.
Amagasaki Match Factory.
Awa Ringi Works.
Kojima Match Factory.
Ibune Match Kabushi Kaisha (company), Ibune cho.
Washio Match Works, Akashi Machi, Akashigori.
Meirin Goshi Kaisha (company).
Kobé Sanchu Goshi Kaisha (company), Tsugahama Mura Bukogori.
Takashima Match Factory, Takaoka Mura, Shigama gori.
Meisui Sha, Oshio Mura Innami gori.

AMERICAN CLOVER SEED IN AUSTRIA-HUNGARY.

An attempt is being made by the agrarian press of Austria-Hungary to exclude the importation of American clover seed. Already two shipments, each exceeding $1,600 in value, have been returned to New York via Fiume, Hungary. The explanation given is that the seed is infected with Kleeseide (*Cuscuta epithymum**); the actual reason is that in this country the competition from American seed is having a demoralizing effect on the market.

The leading agricultural journals of Hungary have taken the matter up and are petitioning the Government to enact measures that will effectually shut out the rapidly growing importation of red-clover and alfalfa seed. The principal charges preferred against clover seeds of American origin are that they are not only inferior in growing quality to those produced in Hungary, but, chiefly, that it is impossible to rid them of Kleeseide (*Cuscuta epithymum*) and that the continued importation and use of the same will endanger agricultural products of Austria-Hungary. So determined is the stand taken by the press that already dealers are becoming alarmed.

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*Note by Bureau of Foreign Commerce.—Commonly known as dodder.

Dr. von Weinzierl, the director of the imperial royal seed-control station in Vienna, has written a communication to the Wiener Landwirthschaftliche Zeitung, of February 26, endeavoring to refute the statements of Dr. Nobbe, aulic councilor in Tharandt (who reports in favor of the American seeds), declaring that it has been proved in numerous trials that American red-clover seed is inferior, not only to the Styrian, but also to Bohemian and Hungarian varieties. Dr. Nobbe attributes the difference in production between American and European seeds to the small granular size of the American article, and maintains that a comparison of the same with equally small-grained European seed would favor the former. Dr. Weinzierl says:

> As a matter of fact, repeated experiments show that this is not the case; the American red-clover seed is, indeed, somewhat smaller than the prime Styrian red clover, and, for that matter, is about the same size as the Italian seed; yet we have often demonstrated that Italian seeds are superior and more productive than those imported from the United States.
>
> Even if Dr. Nobbe has succeeded in obtaining better results with extraordinarily large-grained clover seeds from different States of America, in the second year, than with the average red-clover seeds, this single instance can not be taken as showing conclusively the higher value of the American red-clover seed that finds its way upon the markets in this country.

Following this publication, came an exhortation on February 23, 1898, from the Köstelek, of Budapest, the leading organ in Hungary devoted to agricultural interests:

> We believe that law No. 12, of 1894, section 51, can be made to cover a prohibition of the importation and sale of American clover seeds. It is natural and certain that dealers interested in the sale of American clover seeds will refer to the existing treaty between Austria-Hungary and the United States, and will claim the impossibility of such a prohibition. However, we must consider that these seeds are a danger to us for two reasons: first, because they are inferior to ours in productive capacity; second, because it is absolutely impossible to rid these seeds of Kleeseide, and therefore the law of 1894, section 51, does not protect them.
>
> Hungarian farmers will consider it a sign of weakness if the Government hesitates to act in the matter, and we shall expect the necessary steps for protecting the interests of the farmer to be taken at an early date. The Government can not afford to hesitate, and measures can be enacted only, as shown above, upon the strength of the said paragraph.
>
> The Minister of Agriculture is fully aware of the danger to farmers; he sees his duty and knows, too, that he has to take positive action.

In direct contradiction to the statements contained in the Köstelek is the communication from the pen of Dr. Nobbe, of Tharandt, published in the organ for German agriculturists—Der Saaten, Fütter, und Düngen Markt. Dr. Nobbe sums up the results of his experiments with American and European red-clover seed and warmly advocates the use of the former. It is a fact, and may easily be proved, that in the most highly cultivated districts of England, Germany, Belgium, Holland, and France, American red-clover seeds are used as extensively as those of continental origin, and that, too, notwithstanding the present unfavorable climatic and soil conditions.

One large dealer in American clover seeds in Vienna states that the assertion that in clover seeds of American origin the so-called Kleeseide is prevalent is altogether incorrect. In fact, owing to the highly developed and exceptionally careful cleansing process employed by American farmers—which this dealer recommends to growers in this country—seeds imported into Austria-Hungary from the United States rarely, if ever, contain traces of Kleeseide.

With regard to American alfalfa, this same dealer says that never, during a business of several years' standing, has he received a single complaint, either directly from his customers or from agricultural circles in general; but, on the contrary, he has heard nothing but praise for the seeds. The allegation of injury suffered by Hungarian agriculture through the use of American seeds, which the Köstelek endeavors to paint in vivid colors, is utterly false. It may also be noted that it was only by last year's import of good American seeds that consumers were saved from paying the outrageously high prices for foreign seeds.

During the year 1897, $100,000 worth, at the lowest reckoning, of American clover seeds was imported into Austria-Hungary.

CARL BAILEY HURST,
VIENNA, *March 5, 1898.* *Consul-General.*

Consul-General Hurst, under date of Vienna, March 18, 1898, says:

Referring to my report on American clover seed in Austria-Hungary, sent to the Department March 5, I hasten to add that it is stated by the local press that the Hungarian State stations for the inspection of seeds have already been directed by the Hungarian Ministry of Agriculture not to affix, in future, the official seal to importations of American clover and alfalfa seed. The omission of this governmental attestation stamps the seed as harmful and unfit for use.

The text of the prohibitive measure (No. 1894, March 10, 1898) has not been made public, so far as I am able to learn, and is apparently intended for the official seed inspectors only.

It is now feared, in view of the practical exclusion of the seeds in question from Hungary, that steps to the same end will be taken in Austria.

BICYCLE TRADE IN FOREIGN COUNTRIES.*

DENMARK.

All classes, from the royal princes and princesses to the poorest workmen, use the bicycle in Denmark. The number now in use is estimated at about 100,000 for a population of 2,300,000.

The roads throughout the Kingdom are excellent. Denmark is a flat country, with hardly any hills, and must be considered ideal from a cycler's point of view.

The names of the Danish manufacturers are:

Humber & Co., Limited, 26 Möllegade, Copenhagen.

Kjöbenhavus Cyclefabrik, Limited, 10 Meinungsgade, Copenhagen.

Nordisk Cyclefabrik, Limited, Frihavnen, Copenhagen.

Fyens Cycleværk, Limited, Odense.

Dania, Limited, Aarhus.

Supplies are mostly drawn from the United States; but some come from England, Germany, and Austria.

The duty is 10 per cent ad valorem when the machine is put up complete. Importers here order bicycles shipped with the front and hind wheels off. The frame, pedals, etc., pay a duty of 6 øre per Danish pound (100 øre=26.8 cents; 1 Danish pound=1.1 American pounds), and the tires pay a duty of 33 øre per Danish pound; the duty varies, therefore, according to the weight of the bicycle, but seldom exceeds $1 for American bicycles. Importers have lately been allowed to transfer bicycles arriving here ready for use, and incurring a duty of 10 per cent ad valorem, to the Copenhagen free port, where they were taken apart and only the weight duty rate paid. It is not likely that this practice will be allowed much longer, as the domestic manufacturers complain of it. If American exporters ship frames and wheels separately, they are sure to be on the safe side, or they can stipulate that they will not have anything to do with the duty, and leave that question to be settled by the Danish importers. There are no differential duties.

The retail prices are from $25 to $100. The demand is mostly for the cheaper grades, and large quantities have been sold recently at $16 free on board New York.

There are a great number of bicycle dealers throughout Denmark, but American exporters ought to address "Cyclehandlerforeningen' (Bicycle Dealers' Association) in Copenhagen, of which

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*** The following reports on the bicycle trade in foreign countries were obtained at the request of a New York firm, to whom Advance Sheets have been sent.**

L. Bendixsen is president; Emilius Möller, vice-president; and I. A. Lange, secretary.

American manufacturers should send salesmen here. Efforts in this line have met with satisfactory results. A salesman's license costs 160 kroner ($42.88) for twelve months from date of issue, and is good for all the larger cities in the Kingdom. Catalogues should be printed in Danish (not German).

The commercial agency of P. V. Fournais & Co., 16 Gammel Tow, Copenhagen, can give information about the standing of any firm in Denmark.

JULES BLOM,
Vice and Deputy Consul.

COPENHAGEN, *March 5, 1898.*

FRANCE.

Bicycles are in general use in this consular district, and the number used is restricted only by the financial inability of the greater proportion of the people to purchase them.

The use thereof is increasing, and, owing to the great reduction in the prices of all makes, the coming year will probably show a greater growth than any previous season.

The streets of the large towns are generally poorly paved and ill-adapted to the use of the wheel, but the country roads are very level and smooth.

The principal supplies come from domestic and English sources. I do not think wheels of any other make are to be found in this district.

The duty on wheels or parts thereof (accessories pay the same rate) is 250 francs per 100 kilograms ($48.25 for 220.46 pounds) if imported direct; 253.60 francs per 100 kilograms ($48.95 per 220.46 pounds) if imported indirectly or through another country. To all countries paying the minimum tariff (any European country), the rate is 220 francs per 100 kilograms ($42.46 per 220.46 pounds).

The retail prices range all the way from 250 to 500 francs ($50 to $100), according to make and finish. There is a demand for the best wheels at cheaper prices than have hitherto prevailed.

American cycle manufacturers could better introduce their goods into this consular district by putting a few in the hands of reliable parties for exhibition on the roads, in public places, and in the many local meetings, than by sending so many circulars, price lists, etc., which, however artistically and carefully prepared, are practically of no use when printed in a language foreign to that of the country where they are sent, and which have the added disadvantage of weights, measures, prices, etc., expressed in unfamiliar units and phrases. All matter of this kind for use here should be in the French language, with sizes, weights, measures, etc., stated in units of the metric system and prices in francs. Such advertising, if supplemented by the sending of samples as above intimated and personal solicitation by agents familiar with the language, tastes, and trade customs of the people, in connection with liberal terms of payment, would doubtless prove effective and ultimately result in a greatly enlarged sale of American bicycles in this consular district, and probably in all parts of France. No other conclusion seems possible, in view of the fact that the English wheel has in the past practically divided the French cycle trade with the local makers, while the value of the exports of American wheels to Great Britain in 1897 was about 300 per cent more than in 1896. No other wheel could compete with the American in France, if it is pushed here with the same intelligence and vigor as in the home markets.

Both French and English bicycles are sold to the local merchants on long time—generally three months—and it would be practically impossible to institute cash payments for American wheels, until they were well introduced and their superior merits appreciated by the cycling fraternity.

CHARLES W. SHEPARD,
CALAIS, *March 11, 1898.* *Consul.*

ITALY.

Commercial Agent Hayden writes from Castellamare di Stabia, under date of March 1, 1898, substantially as follows:

Bicyles are not in general use in this district. Riding is confined to certain classes, but the use of the wheel is increasing. To be sold here, bicycles should be of a cheap quality, owing to the scarcity of money. There are no local factories, and bicycles are chiefly obtained from abroad, the duty on each being 42 francs (gold), or $8.10. The price usually asked for a wheel is from 250 to 700 lire ($48.25 to $135);* and there is a demand for cheaper, as well as for better, wheels, the European wheel being inferior to the American.

In order to increase sales in this line in Italy, I would suggest that American manufacturers secure proper agents. All catalogues, etc., must be in the Italian language. The roads here are excellent; there is no locality in Europe better suited to bicycling.

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* Taking the value of the lira at 19.3 cents, as fixed by the United States Director of the Mint.

ONTARIO.*

Under date of March 9, 1898, Consul Burke writes from Port Stanley and St. Thomas:

There will be a demand in this district this season for a cheap, reliable wheel for practical use by the poorer class. The streets of this city, as well as the roads leading into the country in all directions, are admirably adapted to wheeling. Port Stanley is a favorite summer resort for both Canadians and Americans.

There are numerous small factories throughout Ontario, but the larger proportion of wheels in use are of American manufacture, the duty being 30 per cent ad valorem. After July 1, a preferential tariff arrangement with Great Britain will go into effect. The preferential duty will be: Tariff, 30 per cent, less 25 per cent, or 22½ per cent net ad valorem.

Prices range from $35 to $85. Local merchants buy on short time. I think, however, that a liberal cash discount, made early in the season, might be an inducement to some of the dealers to take a limited number of cheap wheels. The principal handlers of bicycles in this city are Stacey & Sons, James Acheson, W. J. McMurtrie, and M. J. Baker.

The population of the city is (approximately) 13,000. It is a railroad center, being division headquarters for the Michigan Central, Grand Trunk, Wabash, and Lake Erie and Detroit River railroads.

SAXONY.

Bicycles are used in Dresden by the wealthy and the middle or well-to-do classes. The lower and poorer class could hardly hope to accumulate enough money to buy them, although the remarkable reduction in the prices of American wheels may place them within reach.

The streets of Dresden are paved with asphalt and stone blocks, or macadamized, and are kept hard and smooth by constant rolling. They are clean, and furnish delightful avenues for wheeling. In the Grosser Garten are many miles of dirt roads, level and smooth, and, besides these, roads are being made in the park exclusively for cycling. Throughout Saxony the roads are hard, smooth, and kept in good repair.

Americans supply the largest number of wheels sold in this market, but there is considerable traffic in English bicycles. Large numbers are made in this city and in Chemnitz.

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* For another report on bicycles in Canada, see CONSULAR REPORTS No. 211 (April, 1898), p. 488.

The duty on American cycles is from 3 to 5 marks (71 cents to $1.19) each. Some time ago it was reported the Saxon Government would increase the duty to 20 marks ($4.76) or more, in order to protect their own manufacturers; but it has not yet been done. A large dealer told me that the increase would not affect their sale. There is no differential duty favoring manufactures of other countries. All imports are charged alike.

It is rather difficult to ascertain the retail prices, particularly now, when such marked reductions are being made. The cheapest American wheel retails here for 150 marks (about $36), while standard wheels, such as the Columbia and Cleveland, sell for 420 marks ($99), 340 marks ($80), 250 marks ($59), according to quality and date of make. The English Humber sells for 750 marks ($178) and 650 marks ($154), first and second grade, and is the only English wheel used here.

The demand for the better class of American wheels is increasing. The wealthier classes appreciate their excellence, and are willing to pay the difference in price. If a German wants a cheap wheel, he prefers home manufacture.

The best way to bring the American cycle to the notice of the people is to send a representative who can speak the language and has time and patience. The valuable and extensive trade of Saxony in bicycles is worth effort and attention. The only other plan is to select a trustworthy local agent, and make it an object for him to work. Sending circulars, particularly those printed in English, is a waste of time and money, for they are usually consigned to the waste-basket.

The names and addresses of some of the dealers are:

C. F. Bernhardt, Reitbahn Strasse 18.*
Fr. M. Bernhardt, Waisenhaus Strasse 2.*
Dresdner Radfahrer Institut, Werder Strasse 22.* †
B. Gruhl, Neue Gasse 14.*
H. Niedenführ, Strure Strasse.* †
Frederick Bruner, Löwen Strasse 11.
W. Cramer, Seminar Strasse 9.
Emil Döring, Wettmer Strasse 49.
Arthur Zehl, Porsberg Strasse 25.
Rudolf Schwabe, Zinzendorf Strasse 31.*
Max Förster, Grumaer Strasse 25.
Max Fuchs, Wettenberger Strasse 75.
F. Gottschalk & Co., Oppell Strasse 58.
C. H. Günther, Markgrufen Strasse 6.
Th. Häusch, Marschall Strasse 25.
Adolf Hauch, Glacis Strasse 18.
Louis Kluge, Augsburger Strasse 6.
P. Lehmann, Königsbrücker Strasse 56.*
Fried Meissner, Poppetz Strasse 16.
F. B. Müller, Mathilden Strasse 2.
Ernst Peterman, Marschall Strasse 5.
Ramm Carl Co., Albrecht Strasse 9*b*.
August Richter, Wettenberger Strasse 17.
Emil Roth, Franklin Strasse 2.
Paul Seibt, Gluck Strasse 3.†
Julius Strohbach, Holbein Platz 5.

While I do not personally know of the financial ability of any of the parties named above, those marked * are said to be reliable. Those marked † keep places where instructions are given to beginners.

Local dealers buy on three, four, and six months' time, and I do not believe any reasonable discount would be sufficient inducement for them to send cash with the order. It would be sixty days from the time remittance was made until goods are secured, and, besides, the German prefers to see what he has purchased before paying for it. The trade of Saxony is conducted on long credits, and a merchant of this city would have no objection to selling a bill of furniture, carpets, etc., with the understanding that it should be paid in six months.

American bicycle manufacturers seem to have a wrong impression as to the proper time for looking after the market. In the past thirty days I have received a number of inquiries that, to be effective, should have been sent last fall. The largest dealer in this city told me he gave his orders during December, and this will not give him more than sufficient time to receive the goods and have them ready for the spring trade, which usually commences early.

CHAS. L. COLE,
Consul-General.

DRESDEN, *February 23, 1898.*

SPAIN.

Cycling in this district is almost entirely confined to the young members of the middle classes, and is considered merely a pastime. The use of bicycles is not increasing; there is no demand, and it would be difficult to induce the lower classes to buy them, unless the actual prices were much reduced without seriously affecting the quality of the machines. Very little is to be expected from the wealthy classes.

There are no domestic factories, but I understand that something in that line was projected some months ago at Ferrol. Bicycles are principally imported from Germany; a few come from England and France.

The duty on wheels entering from the above-named countries is 70 pesetas ($13.51) per 100 kilograms (220.46 pounds), minimum; those entering from the United States pay 84 pesetas ($16.18) per 100 kilograms, maximum.

Retail prices range between 450 and 650 pesetas ($86.85 and $125.45). A very limited number have been sold for 700 pesetas ($135.10).

The problem is to increase the popularity of the bicycle. A trial might be made by establishing an agency with show rooms, and exhibiting neat-looking, cheap machines, with a few high-grade ones.

There are only five importing dealers in this district; of these, all but one are also engaged in some other line of business, such as sewing machines, etc. They buy generally on short time. It is very doubtful whether liberal discounts would induce them, for the present at least, to send cash with orders to the United States.

The superiority of American wheels is not ignored here, but their importation meets with the same obstacles that keep Spanish ports closed to many American products. There are no direct means of communication, and there is a difference in the duty of 14 pesetas ($2.70) per 100 kilograms against the United States.

The exchange is also a drawback. The quotation to-day is 34 pesetas to £1, which is equivalent to 7.20 pesetas to $1.

JULIO HARMONY,
Consul.

CORUNNA, *March 9, 1898.*

SWITZERLAND.

The following are answers to questions sent to this office by a firm of cycle manufacturers of New York City:

All classes use the bicycle in Switzerland, and the use thereof is rapidly increasing. The roads here are fine, but there are hills—and always more hills—to climb.

There are only a few small cycle manufactories in Switzerland; they are located at Arbon, Zurich, Basel, Lausanne, and Geneva. Germany furnishes most of the wheels for the Swiss markets, as well as the majority of other articles.

The duty on all foreign cycles is 70 francs per 100 kilograms ($13.51 per 220.46 pounds) gross weight. There are no differential duties. The retail prices are from 250 to 500 francs ($48.25 to $96.50). The latter are the American and English prices.

There is a good demand for a well-built, solid, cheap cycle; but it must be strong, and the price low enough to enable competition with the German prices, which range from 300 to 375 francs ($57.90 to $72.37).

The American cycle is recognized as the most satisfactory one on the market, but is considered too expensive for most purchasers here. The best Swiss, Austrian, and German wheels cost from 350 to 375 francs ($64.85 to $72.37), while the American wheel costs 500 francs ($96.50).

E. A. Maeder is the largest dealer in St. Gall. He sold American wheels for some time, but found when they needed repairing that there was a lack of proper facilities; and, as this caused dissatisfaction, he discontinued the sale. The only way to reach the local trade is through energetic, capable agents. Last year Germany sent 3,257 commercial agents into this country and the United States sent none.

The result was that Germany captured the cycle business and nearly every other line of trade.

Circulars sent to Switzerland should be printed in the French and German languages.

The usual credit here is from three to six months.

If the American wheels could be sold as cheap here as the German makes and could be as easily repaired, and if the same effort were made to gain the Swiss market that the Germans have put forth, they ought to be widely sold, as they are the best-liked wheels in Europe. Local competition would not be great, as only 2,400 wheels were manufactured in Switzerland last year.

JAMES T. DUBOIS,
Consul-General.

ST. GALL, *February 26, 1898.*

AMERICAN BICYCLES IN GERMANY.*

An interesting side light has been thrown upon the present situation of the American bicycle trade in this country by a controversy that has recently arisen between the Verein Deutscher Fahrrad Händler (Association of German Bicycle Dealers) and one of its members, a dealer at Winsen, in Hanover. The association comprises about one hundred and fifty of the principal retail bicycle dealers in Germany, who operate independently of manufacturers and buy their stocks wherever they can do so to best advantage.

Many of them sell as a specialty one German-made bicycle, and keep also in stock one or more imported brands, which last are usually of American origin. The competition of these American wheels has now become so serious that the German cycle manufacturers have done their utmost to induce the association to compel its members to abandon the sale of American cycles and patriotically confine their trade to those of German make, which have been during the past two years greatly improved. To this demand the association has nominally assented; but, as everyone knows, its members reserve the right of acting individually in their own best interests—in other words, the right to buy and sell American bicycles when they can do so to advantage.

Out of this situation arose the dispute between the bicycle dealers' association and Mr. Weese, the dealer at Winsen above referred to, who, as it appears, had purchased a number of American cycles, which he advertised for sale at 150 marks ($35.70) each. Thereupon the association, inspired presumably by the Manufacturers' Union, attempted to call Mr. Weese to account through an official letter, of which the following is a translation:

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* For another report on this subject, see CONSULAR REPORTS No. 208 (January, 1898), p. 71.

> We must absolutely protest against your offering American machines at 115 and 150 marks ($27.37 and $35.70), the trade in German bicyles being severely damaged by this action. You do not dare to say that an American wheel sold at such prices can be compared with a reliable German make. Therefore, if you do not cease advertising in this way, we shall proceed against you in a proper way; first through the trade papers. We leave it to you to consider whether a first-class American wheel can be sold for 150 marks, and whether this is not sufficient ground for bringing you before the courts for violation of the unfair-competition law.

To this threat, Mr. Weese replied as follows:

> I am at a loss to understand your letter of January 7. Nearly all the bicycle dealers whom you represent have American wheels besides their German makes. How can you, therefore, abuse American bicycles? I am buying my wheels where I can get them best and cheapest. We do not want to play blind-man's buff with each other. I beg to refer you to the following addresses: F. Livock, Hamburg, who sells Boyd wheels; Arn. O. Hertz, Cröningerstrasse, Hamburg (Tribune wheels); and Louis Ritz & Co., who sell the Monarch wheel. These are all excellent American makes that surpass the German-made wheels in every respect. The prices of these cycles amount to 120 marks ($28.56), free at Hamburg, and why should I not sell them for 150 marks ($35.70)?
>
> However, in case you are respresenting the interests of the German factories—which I must suppose—I beg to inform you that no German factory is up to the mark, and that next year the Cleveland firm will probably establish a factory in Germany, with a yearly output that will knock down, if they wish, the trade price to 100 marks ($23.80) and the selling price to 130 marks ($30.94). As to the rest, I must deny you the right to interfere with my private business, as this undoubtedly falls under the unfair-competition act, your statement that "first-class American machines can not be had at 150 marks" being an untruth.

This correspondence was published in the Radmarkt, an organ of the German cycle trade, and has caused consternation in the ranks of the manufacturers, who now see that their demand for a prohibitory duty on American wheels, if granted, will only have the effect of transferring to German territory branch factories of the great American manufacturers, who, by importing from the United States their parts and materials and putting them together in this country with the cheap labor of German workmen, under superintendence of American expert foremen, will render the competition more fatally aggressive than ever before.

Hitherto, the German cycle manufacturers have urged their Government not to assess a higher duty on imported bicycles as such, but to classify them for duty under paragraph 470 of the present law as upholstered carriages, dutiable at 150 marks ($35.70) each, which would be, of course, prohibitory. This would require no new legislation, but merely an administrative decision, giving to bicycles, which were not an article of commerce when the law was enacted and are not therefore specifically mentioned therein, an arbitrary and unjust classification, under which each cycle would pay the same duty as a four-wheeled carriage. As this would apply to all imported bicycles—those of English and Belgian manufacture, as well as American—and thereby militate against certain commercial treaties, the decision, notwithstanding the frantic protests of the German makers, has not yet been given.

Meanwhile, the leading American cycle manufacturers—whose German trade formed an important part of their business in 1897, and whose sagacious enterprise in building up and sustaining this valuable outlet for their surplus product may well serve as an inspiring example to Americans in many other lines of trade—are stocking their depots in this country with full supplies for the incoming season and are preparing to establish auxiliary factories here whenever the prohibitory edict may fall. Popular opinion, even in Germany, is distinctly on the side of the American manufacturers, whose products have not only cheapened, but greatly improved, the standard of excellence in bicycle construction, whereas all the principal German makers have earned large incomes from both their home and export trade, and are not therefore considered to be in a strong position to demand new and extraordinary protection.

FRANK H. MASON,
FRANKFORT, *February 26, 1898.* *Consul-General.*

AMERICAN CYCLES IN IRELAND.

The American bicycle—perhaps the most widely known and appreciated article of American manufacture—is making an invasion of the British markets and carrying almost everything before it. In this district the American bicycle has a special popularity. One sees more high-grade American wheels—the Columbia, Cleveland, Victor, Crescent, etc.—on the street than English makes. The public are beginning to fully understand the superior qualities, the great advantages of the United States machine—its lightness, strength, and easy running.

A short time ago, the impression prevailed that American wheels were too light for Irish roads, and that the wooden rims used were not suitable for the damp climate. It would now appear that the public is no longer of this opinion. Not only have the light American machines become popular and their lasting qualities and strength been proven, but British manufacturers have been compelled to build lighter machines to suit the public demand.

Another feature which is liked in American machines is the longer crank and higher gear. While the British machine has a

6-inch crank and 60-inch gear, the American will have a 7 or 7¼ inch crank and 70-inch gear.

There are, however, several features in American wheels which will hardly become popular here—the single tube, cemented on the tire, and the absence of room for a gear case. United States manufacturers would do well to fit machines with rims suitable for detachable double-tube tires, and to leave room, when building machines, for a gear case, as the latter is essential to a touring machine in Ireland. Were this done, I think the sale of our machines would rapidly increase. Even at present, there appears to be almost an American monopoly in this market, if our manufacturers continue to supply machines of as excellent workmanship and high standard as heretofore.

DANIEL SWINEY,
Consul.

CORK (QUEENSTOWN), *February 24, 1898.*

AMERICAN SHOES IN EUROPEAN MARKETS.*

A trade journal in the United States recently quoted the opinions of two shoe manufacturers concerning the European market for American-made shoes. One of them said:

> The masses of people in Europe want cheap, substantial foot wear, and European shoe manufacturers are in a much better position to cater to their wants than American manufacturers.

The other declared:

> I am confident that there is no real European market for American foot wear, and I don't think American shoe manufacturers will give the subject much attention. * * * If the American manufacturer could afford the expense necessary to make a successful effort to place his own goods on the European market, he would in all probability conclude that he could get better and safer returns by putting the required cash and energy into his business at home.

If these quotations represent fairly the views of the American shoe-making industry, there is, of course, nothing more to be said; and consuls, trade journals, and export associations alike only waste their time in trying to persuade such placid conservatives that there is a field for the sale of their surplus products abroad, or in explaining how such opportunities for export may best be utilized. But it had been supposed that a majority of the American people had reached a sufficiently advanced stage of development to feel that it is not a wholly ambitious and satisfactory destiny for a country like ours to manufacture only what it can use and raise only what its people can eat.

Especially would such a broader and more aggressive policy seem applicable to the present condition of American shoe manufacture, which, from all accounts, has reached a capacity to produce in from eight to ten months a full year's supply of foot wear for the home market. Whoever has read the shoe and leather trade papers during the past year, must have learned that there has been on hand during most of that period a large surplus product, that many factories have been meanwhile running on much less than full time, and that prices in the shoe market have been remarkably low. Mr. George Hutchinson, a Boston manufacturer, says recently:

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*See CONSULAR REPORTS No. 211 (April, 1898), p. 490.

> The United States is now overstocked with shoes; this country can manufacture 50 per cent more shoes than it can wear.

The problem remains, therefore, what to do with the output of the three or four months of each year after the requirements of the home market have been met.

While it may not be possible to convince the manufacturers quoted above, who have assumed to speak in some degree for their entire industry, there seems to be in certain other quarters an awakening interest on the subject of shoe exports, sufficient, perhaps, to justify one more attempt to describe the opportunity that exists for such a trade in Germany, and the radical defect in all attempts which have been thus far put forth to utilize it.

In the first place, is it true that "European manufacturers are in a much better position to cater to the requirements of their home trade than American manufacturers?" In respect to contiguity to the local market, they have, of course, a certain advantage; but in most other respects the American manufacturers are masters. It has been stated in a former report* of this series that, although the wages of American shoe operatives are far higher than those paid to similar work people in this country, the labor cost of a pair of American factory-made shoes is definitely less than that of a similar pair of shoes made in a German factory. The reasons for this apparent anomaly are that the American factory system is admittedly superior to that of any other country. In our country the shoe manufacture has been specialized; the whole energy of a factory, equipped with the most perfect machinery, is concentrated upon the production of one, two, or three special classes of shoes, one factory turning out, for instance, only women's shoes, another men's, and another children's foot wear of a certain style and price.

The German manufacturers, on the other hand, have generally not yet passed the stage at which a single factory is spread out over the entire industry, and makes everything that the retail dealer may want—shoes of several grades and patterns, for both sexes, and for all ages and conditions of life. The result of these different systems will be readily guessed. While a European shoe factory employing, say, 100 operatives turns out 200 pairs of "Goodyear-welt" shoes per day, the American factory with the same number of employees produces from 450 to 500 pairs, and, although the wages paid to the American work people are higher per day, the labor cost of their work is less per pair than that of the German product. A Chicago shoe manufacturer was invited last summer to visit a shoe factory in South Germany that had been equipped with modern American machinery, and, having looked through the place, was asked by the proprietor what he thought of it. His reply was:

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* See CONSULAR REPORTS No. 209 (February, 1898), p. 165.

> Your factory is all right, your machinery up to date; but, if any American shoe man should try to make as many kinds of shoes as you do, he would be swamped within six months.

How long this disparity will continue may be uncertain, but experienced German shoe manufacturers, who understand the subject fully, assert that it is impossible for them under existing conditions to change their system and concentrate their work upon fewer qualities.

Further, the American factory-made shoe is unequaled in style of cut, elegance of finish, and serviceable qualities by shoes of similar cost made in any other country. Says Mr. Max Vanstraaten, a shoe merchant of Amsterdam, who has had long experience in selling English-made shoes on the Continent, particularly in Germany and the Netherlands:

> It is my opinion that the Americans are at least half a century ahead in the manufacture of foot wear, with regard to elegance, style, and excellence of workmanship.

As has been already stated, there is nothing of local manufacture in the German market that will at all compare, in point of style, durability, cheapness, and excellence of workmanship, with the shoes for men, women, and youths that are retailed throughout the United States at from $2.50 to $3.50 per pair. A dealer in this district who had bought from a traveling salesman a lot of American-made shoes, which he sold promptly at high prices, states that their only defect as merchandise was that they made his customers discontented with his other goods. The European-made shoe is generally broad, short, and stumpy, with flat, nearly straight sole, while the American shoe conforms to the anatomy of the foot, and, being correctly modeled, prevents the foot from pushing forward and maintains a shapeliness and elegance of form that is appreciated here as highly as anywhere.

Only the grossest ignorance can obscure the fact that in the Germany of to-day a large and rapidly growing percentage of the people, especially in all the cities and larger towns, are educated and progressive in all that relates to dress and the comforts and refinements of living. They appreciate, understand, and are perfectly able and willing to purchase, at reasonable cost, what is best and most becoming, and they have no serious prejudice against an imported article which is superior to that of home manufacture. For more than a century France has been the arbiter in matters of taste, and her exports of high-priced goods, in which style and beauty form an important element of market value, have made that country rich and prosperous. In one branch of manufacture—that of factory-made foot wear—the United States has now taken the lead, and the only question is whether our manufacturers will show sufficient skill and enterprise as merchants to reap the harvest that they have sown.

That some of them at least are awakening to their opportunity, there is much encouraging evidence. There are now in London two large and successful shoe stores which imported, as the record shows, 10,161 pairs of shoes from New England during the month of November. A combination known as "The Alliance of American Shoe Manufacturers" has also an agent in London who sells by sample, but his employers have not yet decided to establish a depot on this side of the Atlantic. From time to time a salesman from an American shoe factory passes through Germany, making more or less important sales to retail dealers. Says Mr. George Hutchinson, a manufacturer at Boston:

> We have had dealings with Germany, and have sold within a year several thousand dollars' worth of shoes to a Dresden dealer. He expresses satisfaction, and, we have reason to believe, contemplates further trade.

Secretary George Houghton, of the New England Shoe and Leather Association, who is presumably as well informed as anyone in America, says recently in a trade journal:

> Germany offers, I believe, an excellent market for American shoes, but our local manufacturers have not waked up to a realization of its advantages. American shoes are certainly regarded with favor in Germany, because in the medium-priced lines there is a very attractive style and finish.

This is an exact statement of the case as it exists to-day. But nowhere in Germany is there yet to be found the all-essential wholesale depot, representing a number of firms whose products form a comprehensive, all-round assortment of men's, women's, and children's shoes, managed with American ideas of energy, liberality, and enterprise, and from which dealers throughout the Empire may replenish at short notice their depleted stocks. Without this, as has been said and reiterated until the topic has become threadbare, American shoes can figure in the German market only as a luxury, to be sold to a limited class of customers, at prices out of all proportion to their retail values at home.

The few traveling salesmen who have visited this country during the past six months have had generally fair success, although some of them have represented only special lines of goods, rather than a general assortment, such as is demanded by every-day trade. The German retail shoe man is by nature and education conservative. His capital is often limited, and he has become used to being supplied from hand to mouth by German, Austrian, and other European manufacturers. He sees and admits the superiority of American shoes, and orders a few gross or dozen for a trial; but where and how is he to replenish his stock, when this first supply is exhausted or certain sizes and numbers sold out? To order from the factory at Lynn or Newark or Rochester will entail a delay of from six weeks to two months before the goods arrive. He is not by knowledge or experience an importer; he knows nothing of paying by remittance to a foreign country for goods that he has not seen; and the result of all these difficulties is that, unless encouraged by the opportune arrival of another American drummer, he weakens and gives up the effort.

No one with any practical knowledge of the subject will assert or expect that the business can ever attain any real importance through such methods. The merits of American factory-made shoes will render them popular and salable wherever they are offered at fair prices. A few can be sold even at high prices to the better class of purchasers, but the export trade to Germany can never become the important traffic that it ought to be until our manufacturers appreciate and learn the real wants of this market and meet them by the same energetic, intelligent means that the Germans employ so effectively in mastering and developing a foreign trade.

FRANK H. MASON,
FRANKFORT, *February 16, 1898.* *Consul-General.*

RUBBER IN GERMANY.

In English newspapers, attention is called to the extraordinary increase of Germany's imports of caoutchouc and gutta-percha. These imports from 1881 to 1896 were as follows:

	Pounds.
1881	3,978,000
1886	4,348,080
1891	8,041,880
1896	14,019,720

In view of the greatly increased imports in 1896, the question arises whether the home consumption has grown in a like degree. If one considers the importance and expansion of the German bicycle industry, the question may be answered in the affirmative; but, on the other hand, the exports of caoutchouc and gutta-percha goods (caoutchouc thread, coarse and fine; tissue, toys, etc.) have also greatly increased. According to the English authority, they were:

	Pounds.
1893	7,666,000
1895	7,283,060
1896	8,847,000

These figures, however, do not appear to be absolutely trustworthy, for Germany's imports of caoutchouc and gutta-percha were 8,280 tons in 1896, against 4,406 tons in 1891 and 4,191 tons in 1889; while her exports of rubber goods were 3,960 tons in 1896 and 3,738 tons in 1895. It must, besides, be observed that during these two years 1,908 tons and 7,862 tons of caoutchouc and gutta-percha were exported.

During the first seven months of 1897, Germany imported 5,072 tons of caoutchouc and gutta-percha, against 4,660 tons for the same period of 1896. The corresponding exports of caoutchouc were 1,308 tons and 1,025 tons; manufactures of caoutchouc, 3,176 tons and 2,436 tons; so that the exports of the latter continue to be on the increase.

THOS. EWING MOORE,
Commercial Agent.

WEIMAR, *March 9, 1898.*

GERMANY'S TRADE WITH VENEZUELA.

Germany has at present few commercial treaties (either discriminating tariffs or most-favored-nation clauses) in force with the South American states, among which, after Brazil, Venezuela stands in the first rank.

Germany's most important article of import from Venezuela is coffee (amounting in 1896 to 14,600,000 marks, or $3,474,800, the entire imports being 16,000,000 marks, or $3,808,000).

Coffee is the most important agricultural product of Venezuela, the annual crop averaging 55,000 tons, of which 49,000 are exported. The country produces 77,000 tons of raw sugar, which barely meets the home consumption, only 700 tons being exported. Tobacco exports are 600 tons annually. Another important article of export is cocoa, of which the annual product is 8,000 tons and the export 7,000 tons. Of this, Germany receives comparatively little. The cultivation of cotton, maize, and indigo has been reduced, and cattle breeding, formerly the greatest source of wealth, has greatly diminished. The industries are feebly developed. Commerce would progress rapidly were it not for the continual political and economical wars. Most of the imports (necessaries and luxuries) are from

England, the United States, and France. Germany's shipments to Venezuela, compared with her imports, should be larger. In 1893 she received from Venezuela goods valued at 15,200,000 marks ($3,617,600) and sent thither 12,600,000 marks ($2,998,800). In 1896 the proportion was much less favorable, the imports being 16,000,000 marks ($3,808,000) and the exports but 6,400,000 marks ($1,523,200).

The following table of Germany's more important export articles shows where losses have been experienced in trade with Venezuela:

Articles.	1893.	1896.	Articles.	1893.	1896.
Sleepers	$119,000	$2,380	Railway cars	$47,600	....
Rails	95,200	17,136	Cartridges	214,200	$2,618
Raw-iron goods	238,000	95,200	Silk dresses and lingerie	47,600	10,710
Bridge material	23,800	....	Woolen cloth	71,400	47,600
Guns	428,400	23,800	Glove leather	47,600	23,800
Cotton:			Bottled beer	166,600	142,800
Tissues	285,600	238,000	Stone goods	47,600	....
Hose	95,200	71,400	Falence goods	71,400	95,200

Manufactures of iron show the greatest falling off, according to these figures. This is partly owing to the completion of the railway, which, undertaken by German capital and executed under German management, caused an abnormal export of materials. Arms and ammunition are fluctuating; but the decreased export of textile goods is much more noticeable, and almost all other articles show smaller exportations from Germany. A recent number of the Munich Allgemeine Zeitung urges Germans to renew their efforts to secure this valuable trade. It says:

> A chance is now given to increase Germany's exports to Venezuela, owing to the improved economical situation of the country. The coffee crop promises to be good, and the buying power of the population will probably rise and a lively commercial intercourse between the coast and the interior will develop. Further, the election of the President has been happily accomplished and the Government has resumed payment of the interest on foreign debts. All these are signs of improving conditions in the Republic. It is the duty of German exporters to avail themselves of the chances for an increased export. The German Government will doubtless favor such efforts. It will try to establish better commercial-political relations between Germany and the South American republics. With six of them we have no commercial treaty, though with Chile negotiations looking to the most-favored-nation clause are afoot. With only four is this clause in force, and with two the commercial intercourse is insignificant.

The Germans have struck the keynote when they point out the advisability of establishing reciprocal relations with the South American states as a means of increasing trade, and when they attribute their unfavorable export to the nonexistence of treaties. The development of commercial intercourse between the United

States and these countries was one of the most patriotic ambitions of the late Mr. Blaine, and a proof of his foresight. Equally important is the establishment of numerous lines of American steamships to connect our ports with those of every South and Central American country.

The Germans, too, wisely look to their navy to aid them in gaining these rich markets. That trade follows the flag, many recent incidents have proved. The Germans realize the importance of a navy in connection with foreign trade.

THOS. EWING MOORE,
Commercial Agent.

WEIMAR, *March 2, 1898.*

CONCESSIONS TO GERMANS IN CHINA.

I inclose an extract from the Shanghai Gazette, giving what purports to be details of concessions granted to Germany for building the railway from Tsingtao (Kyao Chao) to the capital (Chinan-fu), and for controlling the mineral field along the route. A description of the route and of the capabilities of the country I have already sent.*

I need only say that if the statements contained in this extract prove true, we will be debarred from entering into what is really the flower of Shantung. Its effect upon our commerce, which is now increasing by leaps and bounds, will be disastrous.

A German post-office was opened February 1 in Kyao Chao.

JOHN FOWLER,
Consul.

CHEFOO, *February 7, 1898.*

THE GERMAN PLANS AT KYAO CHAO.

[From the Shanghai Gazette, January 31, 1898.]

We learn from Peking that the Chinese Government has consented to the Germans constructing a railway through Shantung on the following conditions:

The line to run first from Kyao Chao to Chinan-fu. Only German and Chinese subjects to be permitted to hold shares in the railway. Mining rights to be granted to the railway company to work mineral deposits for 3 miles on each side of the railway. Only German engineers to be employed on the railway and in opening up the mines. Chinese vessels, both men-of-war and trading, are to be permitted to have the free use of Kyao Chao harbor. The foregoing arrangement is not to be embodied in any treaty or convention, but will be contained in diplomatic notes to be exchanged between the German and Chinese Governments.

* * * * * * *

We understand that the Hongkong firm, Messrs. F. Jebsen & Co., intend to start a fortnightly service of steamers from Shanghai to Kyao Chao, running in conjunction with the vessels of the North German Lloyd and the Hamburg Atlantic Company.

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* See CONSULAR REPORTS No. 209 (February, 1898), p. 221, and No. 210 (March, 1898), p. 344.

UNITED STATES TRADE IN SOUTH AMERICA.

The abundant correspondence of an inquiring character from the trade generally in the United States makes the inclosed article from the Herald of Buenos Ayres, of March 1, of interest; conditions being the same in Uruguay as in the Argentine Republic.

ALBERT W. SWALM,
Consul.

MONTEVIDEO, *March 4, 1898.*

THE UNITED STATES AND SOUTH AMERICA.

There have been several commissions and many representatives of commercial houses in the United States who have come here for the purpose of seeing what could be done to increase business between the two countries. In the United States there have been conventions with delegates from various South American states, who have been taken all over that country, and shown all its business and manufacturing, to see what could be done in the way of supplying the wants of trade in this continent. All this would lead one to infer that the business men of that country are looking for a way to enter these markets and compete with European houses; otherwise all this has been sheer folly and waste. No one can for a moment question the right of the manufacturers and merchants of that country to remain at home with their business any more than their right to go outside, if possible; but we repeat that we have a right to assume that all these efforts justify the inference that they would like to enter the South American market, and on this assumption we have a few suggestions to make. So far as we have been able to judge of the effect of these efforts, they have failed utterly, for the reason that they have not been followed up with prosaic arrangements for the doing of the business sought. Many have asked why it is that with all this fuss and show so little has come of it.

The answer is not difficult. There has been and there is a profound ignorance of this country and market which will quite explain the failure. A commission traveling as guests for a few days can not, in the nature of the case, get to understand the conditions of business, and those who remain at home are enveloped in such dense ignorance that nothing can penetrate it. Many a man has come and been impressed with what he has seen, and has been enthusiastic over the thought that he could dissipate the ignorance which he knew to exist regarding the country and its trade; but one after another has gone home and failed to accomplish anything. The other day we were talking to a gentleman who has just returned from a visit to the United States, who, when he started, had his head and his bag full of schemes which he felt certain he would carry through if he could but get to talk with the business men there; and now he says they do not know anything about this country at all—whether Argentina is in Brazil, or Brazil is in Argentina, or whether both are in Peru; and they have not the slightest conception of business conditions here, nor have they any thought that they have to conform to these conditions if they would come here as exporters. This is undoubtedly a fact.

A gentleman informed us not long since that he negotiated a very large order with a representative from the United States, and, after prices had been agreed upon, there came up the question of terms, when the buyer asked the usual conditions of all business done with European houses, but these were not acceptable. There was no question of responsibility or security, for these were confessedly as undoubted as a business transaction could be; but the terms were not such as the merchant in the United States had been accustomed to, and so the business fell through. We asked a large paper importer and dealer why he did not get some classes of paper from the United States, and he replied that he could not do it and enter into competition with European importations because of the exigencies of the terms of the American exporter. There is not an importer in this country who has ever made the experiment but will confess that these difficulties have met him at every effort to import from the United States, so that no one here thinks of doing so, except for articles which can not be got elsewhere. The exporter in the United States will have either to conform to the business conditions of this market, change them to suit himself, or keep out of it. It is for him to decide which will be easiest to be done.

We have 700,000 people in this city alone, with great business houses connecting it with all the mercantile markets of Europe, and it is for the American exporter to decide whether it is worth while to attempt to change the commercial customs of the market or whether he will conform to them, or drop the matter and say no more about it. The brass-band demonstrations of itinerant commissions with nothing else behind them are the laughing stock of the market, and the profound ignorance of American trades regarding this market is a standing source of amusement. As illustrating this point, we may remark that during this month we notice the sale of a bull and two rams at one of the two largest stock-auction firms of the city. They were sent out here on consignment by those who have not the most remote notion of the necessities or conditions of the breeding-stock market, and the result was that the animals brought considerably less in paper money than their invoice price in gold, the reason being that they were far below the grade of animals sought, and far below the grade of those which are here on sale from the best cabañas of England, France, and Germany, and below the grade of native stock, which has been brought up to a high standard. The shippers did not know this, and probably they can not be made to believe it, but it is nevertheless true.

There is no possible hope for American trade which does not recognize the necessity of an accurate knowledge of the market and a disposition to accede to the usual conditions of trade. We do not intend to enter into a discussion as to whether they are wise, safe, or the best, as that is a matter for those interested to decide for themselves; but we do insist that American merchants must learn the market and conform to its conditions or they must keep out of it. We hear of projected schemes for exhibiting what Americans can do; but they are not practical, for the reason that this market knows far better what the Americans can do here than they know themselves, and the educational work necessary is not here but there. Though it may wound the vanity of American merchants, we nevertheless venture the opinion that Buenos Ayers merchants know vastly more about the United States and what can be done than Americans know of us here; hence the necessity of educating our friends. Business can be done on a large scale with that country whenever it will meet the conditions of this market and those of the exporters from Europe, and not before, and no exhibition or itinerant commission will change these stubborn facts and conditions.

NOTES.

Trade Conditions in Ghent.—Consul Morris writes from Ghent, March 10, 1898:

Under date of May 4, 1897, I forwarded to the Department the translation of a list of interrogatories* propounded by a committee of inquiry to retailers in the city of Ghent, with a view to determine the reasons of prevailing distress in trade and to inaugurate, if possible, some remedy. The replies to these questions, after collection and classification, have just been published. This report shows that of the 4,650 lists of interrogatories distributed, 4,448 were returned to the committee, 870 persons (or 19.55 per cent) did not reply, and 268 indicated simply their commercial situation. There were then 25.57 per cent of the bulletins without value. A recapitulation of the replies indicates the following results:

Description.	Number.	Per cent.
Complaints against overproduction	2,338	52.56
Complaints against the falsification of food products	474	10.66
Complaints against the law concerning the inspection of food products	472	10.61
Complaints against peddling	282	6.34
Complaints against public markets	158	3.55
Complaints against competition	152	3.42
Complaints against special laws	106	2.38
Demands for free trade	74	1.66
Demands for smaller license tax	52	1.17
Complaints against the competition of convents and prisons	45	1.01
Complaints against credit houses	42	0.94
Complaints against machinery	38	0.85
Demands for protection	30	0.67
Demands that license tax be paid for each article sold	24	0.54
Demands for improvement in the condition of workingmen	23	0.52
Complaints against purchases made in other cities	17	0.38
Complaints against the accumulation of trades	17	0.38
Complaints against fraudulent selling out	16	0.36
Complaints against arbitration	14	0.32
Complaints of divers nature	74	1.66
Total	4,448	....

Belgian Strikes in 1897.—Under date of March 10, 1898, Consul Morris, of Ghent, says:

Advance statistics for 1897 indicate that there were in that year 965 strikes in Belgium, involving a total of 233,000 workmen. The number of strikers was less than for any one of the seven preceding years, 1896 excepted. The number of days of work lost was, however, greater than for the four previous years, being 10,400,000, of which more than half were attributable to the engineers' great strike.

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* See CONSULAR REPORTS No. 203 (August, 1897), p. 551.

The number of strikers interested did not amount to one-fourth of those engaged in the miners' great strike of 1893. Only 23 out of the 965 involved more than 1,000 workmen each, while 497 had at least 50 participants. Of the 936 strikes terminated, those ending in favor of the workmen included 30.5 per cent of the total number of the strikers; those concluded in favor of the employers comprised 20 per cent of the strikers. The other strikes were compromised. Metallurgical and building trades have been the most affected, with 100,500 strikers; then came mines and quarries, with 49,000 strikers; and then the textile industry with 37,250 strikers. On the question of wages there were fewer strikers than during the preceding year (96,000, instead of 115,817), but for a reduction of the hours of labor there were many more (57,000, instead of 3,658).

Antique Furniture in France.—Under date of February 21, 1898, Consul Skinner writes from Marseilles in reference to a law dealing with curio and old furniture merchants, promulgated on February 15, 1898, a knowledge of which, he says, may be of service to the many Americans who visit France with the expectation of buying articles of the above description, possessing artistic or historic value. The consul continues:

The vital feature of the law is the obligation now resting upon all brokers, dealers in old furniture, linen, clothes, jewels, books, dishes, arms, and other objects to keep an official register, signed by the commissaire of police or the mayor, containing "day by day, without blanks or erasures, the name, surname, character, and dwelling of those with whom said broker has contracted; also, the nature, quality, and price of all said merchandise; and said register must be forthcoming on demand." Penalties are prescribed for violation of the foregoing provision, the purpose of which is to prevent fraud in the exchange of old and secondhand goods, especially such as are sought by collectors.

Imports of Wheat at Marseilles.—Consul Skinner writes from Marseilles, under date of March 3, 1898:

The imports of wheat received at Marseilles, France, from ports in the United States during the months of January and February, 1898, show a total of 971,216 bushels of 60 pounds, against none received from the United States in the same months of 1897. The following figures show the same and other facts in greater detail:

From—	January.		February.	
	1898.	1897.	1898.	1897.
United States:	*Quintals.**	*Quintals.**	*Quintals.**	*Quintals.**
Tacoma	4,500			
New York	55,626		28,359	
New Orleans	7,474		30,834	
Galveston	30,078			
Portland	49,000		39,710	
Astoria			13,410	
Total from the United States	146,678		112,313	
Other ports of the world	395,503	311,062	347,875	254,928
Total receipts at Marseilles	542,181	311,062	460,188	254,928

* 1 quintal=220.46 pounds.

American Flour and Barley in Scotland.—Consul McCunn, of Dunfermline, on February 24, 1898, writes:

I deem it of sufficient interest to report that California barley received in this consulate is considered of an excellent quality; the malting capabilities are perfect. The preference here for California barley is so marked that it is said a reduction in the price of Scotch barley is sure to follow. American flour, though, is looked upon with suspicion, owing to the fact that it is believed to be mixed with corn, ground exceedingly fine. I have it from unquestionable authority that four out of nine samples of American flour tested within the past three weeks are alleged to contain 10 per cent of corn flour. The high price of wheat and the low price of corn are believed to have led unscrupulous millers to adulterate their flour in this manner. If this adulteration is not speedily checked, it will expose the American flour trade to great danger, the effects of which will be far reaching.

Export of Persian Lambskins Prohibited.—Under date of February 7, 1898, Minister Hardy sends from Teheran a translation of a note from the Foreign Office as follows:

TEHERAN, *January 16, 1898.*

SIR: It will be in the recollection of your excellency that some time ago I informed you that, on account of the great slaughter of lambs for the purpose of supplying the trade in skins in the Persian and other markets, an unusual scarcity of sheep and mutton had been the result, and consequently a disastrous increase in the price. In order to put a stop to this pernicious traffic and to avoid the necessity for the wholesale slaughter of lambs, instructions have been sent to all the custom-houses throughout the Kingdom to levy a duty of 1 toman (nearly $1) on each skin presented for exportation. Notices to this effect have been addressed to each legation. For the purpose of carrying out the intention of the Government, the exportation of lambskins is strictly prohibited; and I beg, therefore, to request that you will communicate this order to your citizens residing in Persia, that the trade in this article may be done away with. Moreover, if lambskins should be found in the possession of foreigners or natives, for the purposes of trade, they will be considered culpable, and a fine of 5 tomans (50 krans or $5), without any right to appeal, will be exacted from them.

Exports from Zurich.—Consul Lieberknecht writes from Zurich, under date of March 7, 1898:

I beg to state that the exports from this consular district to the United States are increasing, notwithstanding the Dingley bill, as the figures below show:

Period.	Amount.	
	Francs.	
January and February, 1898	2,692,388.88	$519,631
January and February, 1897	2,560,444.19	494,166
Increase	131,944.69	25,465

Business is certainly on the increase; the silk merchants, especially, are filling large orders, and prices remain firm.

Tariff Rates for Siberia.—Consul Smith, of Moscow, under date of March 9, 1898, says:

The question of a northern sea communication is agitating Siberia. Not long ago the Siberian Commercial Gazette said that the steamship owners of northwestern Siberia are about to present a petition as to the lowering of duty on the foreign goods imported by sea. Another paper—the Siberian Life—has sent a second petition on the same question. A third petition was sent direct to the Minister of Finance from a special commission appointed by the town council of Tomsk. The commission says that the commercial relations of Siberia with foreign countries by sea are indispensable to the welfare of the inhabitants. The question is only how to organize these relations, and it is necessary, in order to cover the cost of an extra cruise of merchant vessels to the coasts of Siberia and back, to lower the tariff on certain classes of goods to be imported. Free import rates, in the opinion of the commission, would be desirable for machinery, implements, and materials for mining and gold-digging purposes, for the domestic use of villagers, for the fisheries, etc. Cast iron, bar iron, chemical products, and stearin candles might be imported at a lower tariff, and yet at a rate which would not undermine national industries. At the same time, it would be desirable to raise the duties on brick tea, to avoid the charges by the caravan system, which fall heavily on the consumers in Siberia. The export of Siberian corn and raw materials from the outlet of the River Oby is stated by the commission to be from 10,000,000 to 12,000,000 poods (180,000 to 216,000 tons) annually. Exports from Siberia comprise wheat, oats, fine flour, spirits of wine distilled from grain, flax, hemp seed, hemp, wool, oil, salt beef, bristles, and hair. The list shows the growth of Siberian industries.

Duty on Natural Ice in Denmark.—Consul Ingersoll sends the following from Copenhagen, under date of March 3, 1898:

I have the honor to report that, owing to the extremely mild winter, the duty on natural ice has been abolished by royal decree of February 12, 1898, just signed by the King of Denmark. The duty was formerly 10 per cent ad valorem.

Electric Tramways for Mainz.—Under date of March 8, 1898, Consul Schumann writes from Mainz:

It is proposed to change the motive power of the local tramways from horse to electric power. Two systems are to be used—on one line the storage and on the other the overhead trolley. At the same time, the trolley road is to be extended to one of the suburbs of this city. The Süddeutsche Eisenbahngesellschaft (South German Railroad Company) is now conferring with the municipal and State authorities regarding this project. This company also proposes to establish a trolley road connecting Mainz with Wiesbaden, and another line from Mainz via Kastel, Amöneburg, Biebrich, and Schierstein to Eltville. To supply the power for these lines, as well as for local lines, the company intends erecting a large electric-power station in this city. The estimated cost of effecting the change, including the laying of new steel rails in place of the old ones, and erecting and equipping the power station for supplying power for the local lines and for the two new lines, is placed at $400,000. It is further estimated that the cost of maintaining those cars which are to be equipped with the storage system will amount to about $250 each per annum.

The above information may be of interest to some of our electric-equipment companies.

Dublin Electric Tramway Extension.—The following, dated Dublin, March 18, 1898, has been received from Consul Ashby:

The substitution of electricity for horse traction upon the tramways in the city of Dublin is being pushed with great vigor by the Dublin United Tramways Company, and new lines and extensions of the old system are being planned. The Clontarf line is now operated by electricity, and arrangements have been completed for bringing the electric cars on this line to Nelson's Pillar, the tram center of the city. The work of substituting electricity for horses on the line from Haddington road to Nelson's Pillar, by way of Westland Row and Great Brunswick street, is being rapidly executed. This will connect the electric line from Dalkey to Haddington road with the tram center of the city, and will give an electric tram service from Dalkey to Dollymount, a distance of about 14 miles. The next two months will probably witness the completion of this work, as well as that of the electric line through Pembroke Township. In addition, the Dublin United Tramways Company has lodged a memorial with the lord lieutenant for an order in council authorizing the extension and doubling of the lines of its system in various districts of the city. These extensions and improvements are estimated to cost £74,000 ($360,121).

Proposed Electric Works in France.—The following has been received from Consul Jackson, dated Cognac, March 24, 1898:

I have the honor to report the following proposed improvements, which may be of interest to American electrical manufacturers:

(1) Proposed electric lights and electric tramways at Angoulême, Charente. Communications should be addressed to MM. P. & M. Durand & Co., Lyons, France.

(2) Proposed electric lights and trolley line for the city of Cognac. Communications should be sent to M. Jules Brisson, Maire de la Ville de Cognac, Charente, France.

Electric Trams in St. Petersburg.—Consul Smith, of Moscow, under date of February 28, 1898, says:

Among the various affairs which the St. Petersburg city council has to consider is the working of the tramways. The city council has received over ten tenders for the construction of electric trams from companies in France, Belgium, etc. The city has had a contract with the company now in charge by which the city received 4 per cent of the profits and a certain amount of taxes on the horses used.

During the period of twelve years the company received on an average 535,696 silver rubles ($267,848) per annum; and the net profits, according to reports of the Financial News, were 272,196 silver rubles ($136,098), paying the city 22,651 silver rubles ($11,325.50). In view of the enterprise being profitable—the net revenue being 34 per cent—many people think it would be better for the city to take the business into its own hands, even if it does experience a certain loss in acquiring the rolling stock and horses from the company. Even if this loss were valued, according to the calculation of the city council, at 400,000 silver rubles ($200,000), it would speedily be covered in working the tramways.

Electric Enterprises in Moscow.—Under date of March 15, 1898, Consul Smith writes from Moscow:

The firm of Siemans & Halske has made a proposal to the town council of Moscow to construct six lines of electric tramways in the city and also to take charge of the electric lights, which are now in working order. The concession is to be for a period of forty-five years, and the firm is to be paid at certain intervals out of the net profits of the tramways. For the lighting of the city, the corporation is to pay at the same rate as the cost of kerosene lamps. The contract was concluded about a week ago for 6,000,000 rubles ($3,000,000).

Through Express Trains to Siberia.—Consul Smith writes from Moscow, March 15, 1898:

It is decided by the authorities to have an express service between St. Petersburg and the farthest extremity of the Siberian Railway which is finished. A train will be dispatched twice a month and will make the entire run in six days. The train will consist of one dining car, with library, passenger, and sleeping coaches, and will have all modern conveniences. The service will commence in the month of May.

Need of Direct Communication with Russia.—Consul Smith writes from Moscow, March 9, 1898:

If a direct line of steamships could be established between New York and Russia, to touch at St. Petersburg, Reval, or other Russian ports, it would be a great boon to American manufacturers and shippers in sending goods direct. At the present time, all merchandise has to be shipped first to England or continental ports, and then transshipped to Russia. There is a great loss of time, and the expense connected with the transfer of the goods is considerable. It now takes from eight to ten weeks for goods to reach Russia from the United States. If proper efforts were made to start a direct steamship line to this country, thousands of dollars could be saved. It is of great importance to importers in Russia to avoid transshipment of goods. On goods coming direct from New York to Riga, the difference of the cost in freight, etc., is 15 per cent less than those coming through England or the Continent. American trade with Russia has increased very largely during the last few years.

Population of Russia.—The following has been received from Consul Smith, dated Moscow, February 28, 1898:

On the 28th of January a year had passed since the first general census of the population of Russia was taken. The central statistical committee has published general data as to the number of people in the Empire. According to the report of the committee, this is the result of careful and verified reports, whereas the data published in April, 1897, were founded on preliminary accounts. The population in fifty provinces of European Russia numbers 94,215,000, of which 46,447,000 are males and 47,767,000 females. In ten of the Previsliansky provinces, the population is estimated at 9,455,000, of which 4,764,000 are males and 4,691,000 females. The number of the population in the Caucasus is equal to 9,248,000, of which 4,891,000 are males and 4,357,000 females. Siberia has a population of 5,727,000, of which 2,954,000 are males and 2,772,000 females. The population of Central Asia was determined at 7,721,000, of which 4,158,000 are males and 3,562,000 females. The total is 126,366,000, and counting the Russians in Finland and also those on board of battleships in foreign ports, in Bochara and Khiva, the general total of the population of the Russian Empire is estimated at 126,411,000, of which 63,253,000 are males and 63,158,000 are females. It is very interesting and important to determine the population of the towns, and its percentage of the general number of inhabitants. According to the census of 1897, in the towns of fifty provinces of European Russia there were 11,830,000; in the towns of ten of the Previsliansky provinces, 2,058,000; in towns of the Caucasus, 996,000; of Siberia, 462,000; of Central Asia, 932,000; and of the Bochara, 8,000. In this manner the population of the towns of Russia is equal to 16,289,000; that is, the population of the towns represents about 13 per cent of the total population of the Empire. But if one includes the villages and small settlements, the actual town population will not be less than 20,000,000.

Shipbuilding in Japan.—The following has been received from Consul-General Gowey, bearing date of Yokohama, February 26, 1898:

The inclosed clipping, taken from the columns of the Japan Mail of February 23, 1898, furnishes interesting statistics concerning the recently developed industry of iron shipbuilding in Japan:

> Commenting upon the present condition of the Mitsubishi Dockyard, Nagasaki, the Osaka Asahi says that during the latter half of last year business was somewhat stagnant in the repair works, but continued to be as prosperous in regard to the construction of vessels as in the corresponding period of 1896. The chief employees number at present 159, besides 10 foreigners. Mechanics and coolies employed during the period under notice are reported to have numbered 420,068, the average per day being 2,282. Compared with the average for the previous term, the figures show a decrease of 105 per day. The vessels already constructed and those now in course of construction are as follows:

Name of steamer.	Classification.	Tonnage.	Work.
Uncertain	Steel	2,530	Suspended.
Tokiwa	do	6,150	In construction.
Shinano	do	6,150	Just begun.
Tsukishima	do	1,540	In construction.
Asakaze	Wooden	517	Finishing.
Uguisu	do	517	Do.
First Saiyō	do	689	Do.

> In addition to the above vessels, the construction of fifteen special pumps for use in mines, 60 tons of cast-iron pipes, and other plant is being undertaken. During the term under review, repairs were effected to 107 vessels, of which 70 were Japanese and 37 of foreign style.

Electric Railways in Japan.—In answer to a request for information from the United States Export Association, of New York (to whom the report has been forwarded), Consul Lyon writes from Hiogo (Kobé), under date of March 1, 1898, substantially as follows:

There are three electric railways projected in this consular district. One is to be 15 miles in length, extending from Kobé to Amagasaki. The company has a capital of 500,000 yen ($249,000), and the work is to be completed within two years. The time for beginning the work is not fixed. Another line is to be between Amagasaki and Osaka—5 miles. The company is to have a capital of 300,000 yen ($149,900). The charter has not yet been granted. The promoters of these two roads are: Mr. Shinyemon Konishi, of Itamicho, Kawabe-gun, Japan; Mr. Ki-ichiro Kosone, of Minato-cho, Kobé-shi, Japan, and twenty-eight others.

Another road is projected to run from Kobé to Armina, 15 miles.

The capital is 300,000 yen ($149,900). The date for commencing the work is not fixed. The promoters are Mr. Ki-ichiro Naka, of Arino-mura, Arima-gun, Japan; Mr. Shigezo Yamamoto, of Fukiai-mura, Kobé-shi, Japan, and eighteen others.

Opening for Railway Materials and Firearms.—Consul Halstead writes from Birmingham, under date of March 8, 1898:

In the following excerpt from the London letter in to-day's issue of the Birmingham Daily Post, there is an item of information intended for Birmingham which may have an equal interest to manufacturers of firearms and of car wheels and bearings in the United States:

> Railways in the Far East are, in fact, playing an important part just now. According to information which reaches me from an influential Japanese source, the attention of railway rolling-stock manufacturers should be called to the increasing demand there is in Japan for bearings and wheels. The chief works for the turning out of rolling stock in Japan are the Government shops at Kobé and Shimbashi, and the Nippot and Sanyo companies' shops at Omiya and Hiogo, respectively. At neither of these, however, can wheels or bearings be effectively dealt with, and it is practically certain that increasing quantities of these materials will, for some time, have to be ordered from abroad.
>
> Mention has been made in this column of the fact that the Sultan of Morocco has resolved to rearm his army, and that he has decided to raise the money at once. I now learn that 20,000 rifles are to be obtained, but this number can scarcely comprise the entire intended supply. The Moorish army, however, is an indefinite force, its strength depending upon the allegiance and attitude of the tribesmen. At this moment, it probably does not exceed 20,000 men, and the Sultan's purpose would be to secure only sufficient weapons for the men whom it includes.

New Railroad in Colombia.—Under date of March 16, Vice-Consul Murphy, of Colon, incloses a clipping from the Panama Star and Herald of March 15, 1898, relative to the proposed construction of a new railroad in Colombia. The inclosure reads:

> The registration is announced in London of the Colombian Northern Railway Company, Limited, with a capital of £300,000 in £10 shares, to acquire certain concessions bearing date October 30, 1884, as subsequently confirmed and modified by the Government of the Republic of Colombia, for the construction, equipment, and working of the railway from Bogotá to Zapaquira.

Jerked-Beef Exports to Cuba.—Consul Swalm writes from Montevideo, February 18, 1898:

I desire to call attention to the fact that the exportations of tasajo (hung or jerked beef) direct from South American ports to Cuba continue large.

In the Cuban markets this product of the beef-curing industry sells at from $2.60 to $2.90 for an arroba of 25 pounds (Spanish). It seems to me that our beef packers should get control of the market, and that they could make the product cheaper and better. It is at least worth examination.

Coffee Crop in Guatemala.—Consul-General Beaupré writes from Guatemala, March 5, 1898:

Trade and commerce are reviving. One of the most gratifying things to report is that the coffee crop will be very much larger than expected. The shipments from the ports at this date average considerably more than at the same time last year, and, as the price is rising, financial conditions will be improved.

Notes from Paraguay.—Consul Ruffin writes from Asuncion under date of January 31, 1898:

The movement of trade at the port of Asuncion is small during the summer. Importation has diminished during this season, so much so that the revenue of the Government from this source is 75 per cent less than last summer. This may be due to the very low water in the river, impeding navigation. The chief and most remunerative occupation of the people is cattle raising, although it is done under marked disadvantages, the cattle having to go several miles after water. American windmills erected on these ranches could easily pump enough to supply the demand, and thus cause the fatigue and inconvenience of these trips to be avoided.

There is little industrial development, owing to the lethargy of the people and the warmth of the climate. A sugar plant has recently been established a few miles from Asuncion, which will be, perhaps, the largest in the Republic. Almost all the sugar used in Paraguay is imported, the sugar cane being used in making caña (a sort of rum).

A Giant Gold Nugget.—Under date of March 9, 1898, Consul Smith, of Moscow, says that a telegram from Tomsk announces the finding of a gold nugget weighing 70 pounds in the Spasso Preobrajensk mines, situated on the River Chibyek, in the district of Yeansay. The nugget, says the consul, will be found to take the eleventh place, as far as size is concerned, among the nuggets of the whole world, and the second among those found in Russia. The first was found in the South Ural Mountains.

Opening for American Enterprise in China (Correction).—Referring to the report of Consul Read, of Tientsin, dated May 11, 1897, inclosing a letter from Messrs. Taylor & Co., and published in CONSULAR REPORTS No. 205 (October, 1897), page 289, representations have been made to the Department to the effect that the firm of Taylor & Co., as at present constituted, is not entitled to the consideration given it in Consul Read's report.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
E. Schneegans, Saigon	Feb. 5, 1898	Rice market	Department of Agriculture.
Do	Feb. 15, 1898	do	Do.
Jules Blom, Copenhagen	Mar. 26, 1898	Leprosy	Marine Hospital Service.
E. Schneegans, Saigon	Mar. 1, 1898	Rice market	Department of Agriculture.
John F. Gowey, Yokohama.	Mar. 16, 1898	Rice crop	Do.
Henry C. Morris, Ghent	April 4, 1898	Belgian brewing	Do.
Do	Feb. 28, 1898	Special trade and techical education in Belgium.	Commissioner of Labor.

FOREIGN REPORTS AND PUBLICATIONS.

German Exports to Tropical Countries.—The Moniteur Officiel du Commerce, Paris, November 4, 1897, quotes from a German newspaper as follows:

It would be useful if German exporters would occupy themselves a little more with commercial and economical geography, and not confine their knowledge to mechanical and chance information as to the articles that find a market in such and such countries, where they already have trade relations; let them become acquainted with climates and soils, as well as with the needs of the people. In this way they will avoid many mistakes, as well as loss of time.

Let us consider in detail some articles which may be exported to countries beyond the seas, notably into the Tropics. What machinery shall we send there? This is a most important matter for German industry. It is not a question merely of sending machinery, but of having it set up on arrival without the aid of European engineers and specialists. In the more advanced English colonies, as well as in the seaport towns, the necessary assistance in putting machinery together can be obtained. In the large cities of South America, such as Rio de Janeiro, Buenos Ayres, and even Valparaiso, we may be fortunate enough to find workshops and workmen capable of furnishing useful aid. In the interior there is no such chance. The German manufacturer who delivers machines there can count only on the ingenuity of employees. This is well known, and we need not insist upon it. In tropical countries civilization is partly—often even exclusively—centered in the towns along the coast. The ordinary native civilization, more free from European influence, is developed in the interior and on the highlands. A population has been found there adapted to the conditions of the country, and which may be composed of the descendants of Europeans, of Creoles, or of half-breeds. This is the case, for instance, in Colombia, Ecuador, Venezuela, Peru, Bolivia, Mexico, and different countries of South Africa. There are vast tracts of country which are not open either to navigation or railways, where transportation is still accomplished by means of beasts of burden or primitive vehicles. Often recourse must be had to porters. It is evident that under such conditions the transportation and setting up of machinery present great difficulties. When different associations in Germany agreed to provide with steamboats the lakes of interior Africa, they certainly had no idea of these obstacles, and it was due only to the extreme ingenuity, experience, and skill of Wissmann that at last, after years of effort and partial failure, a little steamboat was placed on the lakes. All machines destined for the interior of the countries above mentioned ought to be constructed to burn wood. Coal is rarely found far from the coast, and very seldom can gas motors be employed. On the other hand, petroleum motors are available, petroleum being now an article of universal commerce. Electric lighting and the production of electric force have a future, as the sources of hydraulic power are found in abundance in these countries. Electric apparatus can be transported more easily, being of less volume than steam machines, and consequently capable of being carried by several mules in file, connected by long poles, even over the mountains, when the curves are not too sharp.

Detached pieces, to be carried on mule back, should not weigh more than 100, 150, or 200 pounds. Care should be taken to distribute the weight equally on both sides of the animal. Where camels are used, as much as 400 pounds can be carried, with due regard to equilibrium. When men are employed, the weight ought not to exceed 100 pounds. Only with the progress of civilization will the present conditions of transport be modified.

These considerations are of importance to German exporters. We are more and more excluded from the North American market by the new customs tariff and by the increasing development of the manufactures of that country, and we are forced in Central and South America to struggle with the competition of the United States, as well as of England, Belgium, and France. The countries of South America are rich in natural productions of every kind; the Argentine Republic, for instance, is preparing to compete seriously with our own agricultural products. The people will employ distilling apparatus for maize, grain, potatoes, etc.; centrifugal apparatus for oil and butter, hand and force pumps, petroleum and gas apparatus, little ice machines for the preservation of perishable products, machinery for making cans, presses for cement and similar paving materials, portable railways, etc. The high temperature will also favor the importation of machinery for the fabrication of Seltzer water, and in the large cities small manufactories of chocolate can be placed. The numerous water courses in these countries will permit the installation of small mills for grinding the local products; also sawmills. The satisfaction of these needs will be slow, and the natives, taught by costly experience, will often hesitate to try new articles. However, the importation of tools is much more easy than that of machinery. Although the inhabitants have shown a certain conservatism in regard to the modern and perfected tools of the United States and Europe, this soon disappears when their practical value is shown, and no price is too high for an article once recognized as good. A certain model of German knives has been sold by millions in Central and South America. Axes, hammers, etc., have been sent there for use in the developing of forests and mines and the cultivation of the fields. Certain knives would suit one country and be of no use in another. The model sent to Pernambuco and the interior of Bahia would not suit Habana. The Spaniards want a long, large knife, resembling a saber, which can be used as a weapon as well as for cutting sugar cane on the plantations.

People do not willingly change an instrument that they have always known, and they are right in wishing to test the superiority of proposed novelties. The same applies to the tools which are used to cultivate the ground; for instance, the plows which Europeans are trying to introduce at great expense. It is very certain that better harvests would be obtained by the use of the plow than the spade. But what does that matter to the native? He has no capital to invest in the purchase of a plow. The harvests he obtains are amply sufficient for the simple needs of his family. He can live, and that is all he asks. More than this, the great distances, the bad state of the roads, together with the expenses of transportation, exclude all ideas of exporting the surplus of the harvests. Why should he apply an excessive culture, which would be without profit? With the development of civilization, especially with the increase of population, all this will be changed. To create needs is the task of the first pioneers of commerce in these countries, more than anywhere else. But one only succeeds by degrees, and it is in countries where new roads are opened that new wants will soonest be created. On the other hand, where there is no circulation, people will remain satisfied with colored beads and gay-hued cloths, and will have neither the desire for the products of luxury and civilization, nor the money to purchase them. To create the means of transport and to open roads for traffic must be the aim of the Germans, if they do not wish to arrive too late on the field of competition. If England and North America get ahead of us, these countries will be lost to our great commerce.

What has been said about machinery and tools applies also to many other articles. Small benches for planing and turning, light and as simple in construction as possible; drilling machines, traveling forges, cylindrical water pipes; sheet iron, plated or corrugated; presses for extracting essences and perfumes, machines for cleaning and decorticating coffee; crushing machines of all kinds for stones, sand, lime, and cement; small machines for rolling, etc., may be mentioned, as well as powder, dynamite, and cartridges for cutting rocks and blasting mines; wire and cables for the mines, and light material for building bridges, ironwork, nails, wooden screws, etc.

It should be remembered that the ports and towns along the coast have a considerable trade with sailing vessels and also with steamboats. The maintenance of the channel compels the use of dredging and other apparatus, and the construction of wharfs. Mechanical apparatus for repairs is also necessary. Our optical and surgical instruments enjoy an excellent reputation. Our veterinary apparatus and remedies are less known. Our arms are still very little exported, in comparison with English and French models. Whoever visits South America finds everywhere cartridges for the Lefaucheux guns, but none for firearms manufactured in Germany. English arms and cartridges are to be found in every part of the world, and Belgian arms and projectiles on nearly all the coasts of Africa. Why should not German manufacturers agree to produce a firearm at a low price, which, by reason of its quality and cheapness, would become universal?

As to furniture, the climatic conditions of these countries require an absolutely different construction of houses and consequently a different domestic installation. The inhabitant of the south lives less in close rooms; he must have air, and where the climate is healthy, he lives with open windows—out of doors, so to speak. Stuffed furniture is horrible to him, because he finds it too warm. He likes light and comfortable wooden furniture. Beds and mattresses must be differently constructed from those used in the north of Europe. Wall hangings appeal to him but little; people in the country prefer whitewashed walls; in the towns, wall papers and a few European hangings are used, but the custom is considered unsanitary, preventing the ventilation of the walls so necessary in warm climates. Stoves are rarely used; as a rule, only when the temperature drops suddenly in the night. Kitchen ranges must be of the simplest construction and adapted for wood, as the inhabitant of the south is not disposed to stand long over the fire during the heat of the day. Besides, his cooking is of the most primitive kind; not but that he has plenty of time to devote to it, for time is the least of his cares, and that is why he is not disposed to buy high-priced watches. These, as well as clocks, must be simple and cheap. He is fond especially of alloys of metal, which do not rust. Glass and cheap beer jugs are sought for everywhere, but the finer qualities find a market only in the large towns.

The fact must never be lost sight of that life in tropical countries is simple, and that luxury is found only in a small number of large cities. Upright and grand pianos find a sale in towns; the country people content themselves with guitars and mandolins. Blinds are everywhere used, but when one undertakes to furnish them, one should know whether the windows open on the outside or inside, as the construction and dimensions must conform to the mode of opening. It is generally believed that the people of the south wear only light cotton fabrics. This is by no means the case. Millions of people live on table-lands 5,000 feet high or more, where the nights are very cold, necessitating warm woolen coverings and mantles morning and evening. In North Africa, well-to-do people wear the most expensive cloths of French and German manufacture, and at Rio de Janiero beautiful furs are sought for by the women. Finally, in all these countries, they like fine white linen. It is also a widespread error that the inhabitants of the south do not use alcoholic drinks. Nothing is more false. The temperature in the Tropics varies extraordinarily; the writer has many times noted a difference of 40° C. between one day and the next. To contend with the unfavorable influences of these variations upon the health, one must often have recourse to alcoholic drinks.

If we have not, in this article, enumerated all the points which interest exporters to tropical countries, we hope that we have at least shown the necessity of working with method, and that a technical preparation and the assistance of science is necessary if we wish to occupy these markets.

Progress of France in Thirty Years.—The Bulletin de la Société de Géographie Commerciale, Paris (vol. xix, 1897), in a résumé of the commercial progress of France, says:

Since 1869, the postal traffic has nearly tripled; the telegraphic net is almost nine times greater; the tonnage of the railroads has doubled; the number of travelers has tripled; the receipts of the railroads, which were 696,000,000 francs ($135,328,000), have increased more than 500,000,000 francs ($96,500,000); interior navigation has doubled; the production and consumption of coal has increased from 21,000,000 francs to 38,000,000 francs ($4,053,000 to $7,334,000). The production of cast iron has advanced 33 per cent. The discounts at the Bank of France have risen from 6,628,000,000 francs ($1,279,204,000) to 8,621,000,000 francs ($1,663,853,000). Personal property has increased immensely. Deposits in the savings banks, which in 1869 were 750,000,000 francs ($144,750,000), exceed 4,000,000,000 francs ($572,000,000). The number of account books (8,000,000) was never so large. The deposit of funds in banks and societies of credit exceeds 1,500,000,000 francs ($289,500,000). France, since the war, has been able to pay 32,000,000,000 francs ($6,176,000,000) for the public debt and donations; 25,000,000,000 francs ($4,825,000,000) for the army, navy, and colonies; 2,000,000,000 francs ($386,000,000) for public instruction; and 5,000,000,000 francs ($965,000,000) for public works. This does not include the expenditures of private companies. The 12,000,000,000 francs ($2,316,000,000) which the war of 1870 and the commune of 1871 cost have been paid. No country has given such marvelous proofs of activity and of progress, notwithstanding the heavy taxes.

Commerce of Madagascar.—An article in the Revue du Commerce Extérieur, Paris, December 4, 1897, says:

Most of the Europeans settled in Madagascar are of French origin; nevertheless, for a number of years, England has had a more active commerce with the island than France. Apart from the limited number of planters and European officials, the Island of Madagascar is peopled all along the seacoast by negroes. In the interior, the Hovas of the Malay branch predominate. The natives on the coast, whatever may be the names of their tribes, have few wants; they ask for nothing more than cotton cloths and rum. The Hovas of Emyrne are more civilized. Besides cotton fabrics (the only material used in the dress of the lower classes), they appreciate silk goods, toilet articles, and other luxuries of European life. But, as the rich are a feeble minority, the ordinary textiles, of which the natives make their lamba (cotton pantaloons), form the bulk of importations. In 1896, there were imported 6,252,000 francs' ($1,206,636) worth of cotton cloths, of which

Great Britain and India furnished the greater part. North America exports to Madagascar textiles of soft-finished cotton, which are highly appreciated by the natives. They are of a superior quality and have never yet been driven from the market, although the cost of transportation, added to their price, makes them dearer than cottons from other countries. In 1896, France imported textiles of cotton to the value of 551,628 francs ($106,464); and, with the aid of the protecting duties, the French manufactures should replace those from America. Quality and not cheapness should be the object. Weavers should purchase on the island samples of American cottons and try to produce an equal, or even superior, quality. It is worth the trouble, for the United States exported to Madagascar, in 1896, 2,150,000 francs' ($414,950) worth of cotton cloth.

Drinks form another important article of importation. Naturally, French productions are first in the market. Wines, especially good brands, are used by the Europeans and by some native dignitaries. At Tamatave, the great port on the eastern coast, where the foreign population is relatively large, wine sells for 60 to 75 centimes (12 to 15 cents) per liter (1.0567 quarts). The price in the other ports should be nearly the same; but in the interior, notably at Tananarivo (to which transportation must be effected on the backs of men), the price reaches 2.40 to 2.50 francs (46 to 48 cents) per liter (1.0567 quarts). The natives are great lovers of a detestable but very cheap rum, which comes to them from Mauritius. Brandies, absinthes, vermouth, bitters, and other liquors come from France. Counterfeits of French brands come via Hamburg. Beer is either German or English. At Tananarivo, a brewery established by the Jesuits supplies a light beer, which is sold for 40 centimes (7.7 cents) a bottle.

The importation of articles of metal amounts to 1,142,000 francs ($220,406), divided as follows:

Country.	Amount.	
	Francs.	
England	642,000	$123,906
France	475,000	91,675
Germany	24,000	4,632

Hamburg monopolizes the production of saucepans, an essential article of Malay furniture. French manufacturers should turn their attention to this article, procure models, and profit by the new customs duty. English merchants find ready sale for galvanized sheet iron and tin plate, which are much used in tropical constructions. No other branch of importation reaches 1,000,000 francs. Farinaceous foods, of which three-fourths come from England, amount to 668,000 francs ($128,924).

The total value of importations is 12,787,678 francs ($2,468,021), as follows:

Country.	Amount.	
	Francs.	
England, India, Mauritius, and other British possessions	5,749,000	$1,109,557
France	3,280,000	633,040
United States	2,486,000	479,798
Germany	687,859	132,757

Norway, Denmark, Switzerland, Spain, and Portugal figure for some thousands or tens of thousands of francs.

Venezuelan Invoice Regulations.—The following is from the Venezuelan Herald, Caracas, March 29, 1898:

The new Minister of Finance has published the following notice:

"The Government being desirous of obtaining information of the arrival of ships from foreign ports and of the contents of the consular invoices of their respective cargoes, without having to wait until the Minister of Finance here should receive copies of the invoices from the consuls abroad by some subsequent ship: The President of the Republic decrees that from the 1st of April next importers of foreign merchandise shall present to the custom-house, together with their manifests, if not the originals of their respective consular invoices, at least a plain copy of them, which the customs authorities shall remit to this bureau, with the note compared with the original, at most six days after the arrival of the ship."

The attention of shippers to Venezuela, and especially of Americans, who are not usually very careful to comply with the formalities required by foreign ports, is particularly called to the new regulation which has just been published by the Minister of Finance, as failure to comply with the conditions prescribed thereby will entail a considerable amount of trouble to importers.

VT 990

JUN 15 1898
CAMBRIDGE, MASS.

Vol. LVII. No. 213.

CONSULAR REPORTS.

JUNE, 1898.

COMMERCE, MANUFACTURES, ETC.

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DEPARTMENT OF STATE * UNITED STATES OF AMERICA *

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1898.

PUBLICATIONS OF THE BUREAU OF FOREIGN COMMERCE.*

The publications of the Bureau of Foreign Commerce, Department of State, are:

I.—Commercial Relations, being the annual reports of consular officers on the commerce, industries, navigation, etc., of their districts.

II.—Consular Reports, issued monthly, and containing miscellaneous reports from diplomatic and consular officers.

III.—Advance Sheets, Consular Reports, issued daily, except Sundays and legal holidays, for the convenience of the newspaper press, commercial and manufacturing organizations, etc. [See pages I–VII.]

IV.—Exports Declared for the United States, issued quarterly, and containing the declared values of exports from the various consular districts to the United States for the preceding three months.

V.—Special Consular Reports, containing series of reports from consular officers on particular subjects, made in pursuance to instructions from the Department.

Following are the special publications issued by the Bureau prior to 1890:

Labor in Europe, 1878, one volume; Labor in Foreign Countries, 1884, three volumes; Commerce of the World and the Share of the United States Therein, 1879; Commerce of the World and the Share of the United States Therein, 1880–81; Declared Exports for the United States, First and Second Quarters, 1883; Declared Exports for the United States, Third and Fourth Quarters, 1883. Cholera in Europe in 1884, 1885; Trade Guilds of Europe, 1885; The Licorice Plant, 1885; Forestry in Europe, 1887; Emigration and Immigration, 1885–86 (a portion of this work was published as Consular Reports No. 76, for the month of April, 1887); Rice Pounding in Europe, 1887; Sugar of Milk, 1887; Wool Scouring in Belgium, 1887; Cattle and Dairy Farming in Foreign Countries, 1888 (issued first in one volume, afterwards in two volumes); Technical Education in Europe, 1888; Tariffs of Central America and the British West Indies, 1890.

The editions of all these publications except Tariffs in Central America, etc., are exhausted and the Department is, therefore, unable to supply copies.

In 1890, the Department decided to publish reports on special subjects in separate form, to be entitled Special Consular Reports. There are now the following Special Consular Reports:

Vol. 1 (1890).—Cotton Textiles in Foreign Countries, Files in Spanish America, Carpet Manufacture in Foreign Countries, Malt and Beer in Spanish America, and Fruit Culture in Foreign Countries.

Vol. 2 (1890 and 1891).—Refrigerators and Food Preservation in Foreign Countries, European Emigration, Olive Culture in the Alpes Maritimes, and Beet Sugar Industry and Flax Cultivation in Foreign Countries.

Vol. 3 (1891).—Streets and Highways in Foreign Countries.

Vol. 4 (1891).—Port Regulations in Foreign Countries.

Vol. 5 (1891).—Canals and Irrigation in Foreign Countries.

Vol. 6 (1891 and 1892).—Coal and Coal Consumption in Spanish America, Gas in Foreign Countries, and India Rubber.

Vol. 7 (1892).—The Stave Trade in Foreign Countries and Tariffs of Foreign Countries.

Vol. 8 (1892).—Fire and Building Regulations in Foreign Countries.

Vol. 9 (1892 and 1893).—Australian Sheep and Wool and Vagrancy and Public Charities in Foreign Countries.

Vol. 10 (1894).—Lead and Zinc Mining in Foreign Countries and Extension of Markets for American Flour.

Vol. 11 (1894).—American Lumber in Foreign Markets.

Vol. 12 (1895).—Highways of Commerce.

Vol. 13 (1896 and 1897).—Money and Prices in Foreign Countries.

Of these Special Consular Reports, Australian Sheep and Wool, Cotton Textiles in Foreign Countries, Files in Spanish America, Fire and Building Regulations, Malt and Beer in Spanish America, Port Regulations, Refrigerators and Food Preservation, and Tariffs of Foreign Countries are exhausted, and no copies can be supplied by the Department.

Of the monthly Consular Reports, many numbers are exhausted or so reduced that the Department is unable to accede to requests for copies. Of the publications of the Bureau available for distribution, copies are mailed to applicants without charge. In view of the scarcity of certain numbers, the Bureau will be grateful for the return of any copies of the monthly or special reports which recipients do not care to retain. Upon notification of willingness to return such copies, the Department will forward franking labels to be used in lieu of postage in the United States, Canada, the Hawaiian Islands, and Mexico.

Persons receiving Consular Reports regularly, who change their addresses, should give the old as well as the new address in notifying the Bureau of the fact.

In order to prevent confusion with other Department bureaus, all communications relating to consular reports should be carefully addressed, "Chief, Bureau of Foreign Commerce, Department of State, Washington, U. S. A."

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*Formerly Bureau of Statistics. Name changed to Bureau of Foreign Commerce by order of the Secretary of State, July 1, 1897.

DAILY CONSULAR REPORTS.

Beginning January 1, 1898, the miscellaneous reports of consular and diplomatic officers upon commerce and industries in foreign countries will be printed immediately after their receipt at the Department of State in the form of ADVANCE SHEETS, heretofore issued at intervals as occasion seemed to require. The change to what will practically be the daily publication of these reports, excepting Sundays and legal holidays, has been ordered by the Secretary of State, with the view to the promptest and widest possible distribution of the commercial information obtained by the Department of State for the benefit of the mercantile and manufacturing interests of the United States. The daily edition is intended especially for the use of the newspaper press, which will thus be enabled to obtain the reports in full with the least delay, the boards of trade, chambers of commerce, associations of exporters and manufacturers, and other organized bodies engaged in the development of our foreign commerce, and of individual firms especially interested in obtaining such data without loss of time. The monthly CONSULAR REPORTS, being a reprint of the ADVANCE SHEETS in convenient form for preservation, will be issued as heretofore. Persons applying for CONSULAR REPORTS should state whether the daily or the monthly edition is desired, as duplication will thus be avoided.

The order of the Secretary of State directing the change is as follows:

DEPARTMENT OF STATE,
Washington, December 7, 1897.

The Chief of the Bureau of Foreign Commerce is hereby authorized to print a special edition of consular reports, to be known as ADVANCE SHEETS, CONSULAR REPORTS, to be issued as soon as possible after the receipt of such reports in the Department, for the benefit of trade organizations, business firms, the newspaper press, etc. This edition is to be printed as frequently as practicable in the form of single reports or series of reports to be numbered consecutively.

JOHN SHERMAN,
Secretary of State.

The reasons for the more frequent publication of the CONSULAR REPORTS are explained in a report to the Secretary of State by the

Chief of the Bureau of Foreign Commerce, which is, substantially, as follows:

DEPARTMENT OF STATE,
Washington, December 7, 1897.

Honorable JOHN SHERMAN,
Secretary of State.

SIR: I have the honor to call your attention to the condition and prospects of the work of this Bureau, formerly the Bureau of Statistics, with the view to its further improvement. The chief function of the Bureau is the collection and publication of diplomatic and consular reports relating to the commerce and industries of foreign countries. Since the publication of the monthly periodical, CONSULAR REPORTS, was begun in 1880, the operations of the Bureau have undergone a process of gradual development, until now, the Department of State, notwithstanding inadequate resources for this purpose, has become a great agency for the dissemination, by means of its own publications, the newspaper press, and correspondence with trade organizations and individual firms, of fresh and reliable information from all parts of the world as to commercial movements, industrial activity, development of new fields of enterprise and the practical application of inventions and scientific discoveries to agriculture, mining, and processes of manufacture. Five distinct classes of publications are now issued by the Bureau of Foreign Commerce, viz:

I. COMMERCIAL RELATIONS OF THE UNITED STATES, in two large volumes, being annual reports from consular officers upon trade and commerce, manufacturing and other industries, finance, customs laws, transportation facilities, etc., with special reference to the opportunities for, or obstacles to, the extension of the sales of United States goods abroad. These reports are summarized in an introduction, which is also printed separately in pamphlet form with the title Review of the World's Commerce, for the convenience of those who wish to obtain a comprehensive view of our trade relations with the world at large, rather than to acquaint themselves with facts and figures in detail.

II. CONSULAR REPORTS, issued monthly, and containing, besides the reports of consular officers, either voluntary or in response to instructions from the Department, a great variety of valuable matter from our diplomatic representatives. It is gratifying to be able to state that there has been a noticeable increase in the activity and interest shown by the embassies and legations, as well as by consular officers, in the collection of useful data for this publication, including statistical documents of foreign governments, which are freely availed of. The effort has been made to restrict

the contents of the monthly issue, as nearly as possible, to matter of practical value to our industries and commerce, for the reason that other Departments and Bureaus of the Government are charged with the publication of much of the information which formerly found its way into the pages of what was expressly intended to be a commercial periodical. Duplication of matter in Government publications and consequent waste and confusion are thus avoided. The contents of the monthly reports, nevertheless, still continue to cover a wide range of subjects. They may be said to describe, with more or less fullness, the industrial activity and progress of the world from year to year. But few, if any, inventions or discoveries of practical importance are omitted in the reports from the leading industrial countries, and a number of instances might be cited of new industries established or improvements in manufacturing processes adopted in the United States as the result of suggestions or information supplied in these monthly reports.

III. ADVANCE SHEETS, CONSULAR REPORTS. These are selected reports, of more immediate interest or importance, from the contents of the monthly issue, which are printed in advance for the benefit of the newspaper press, boards of trade, chambers of commerce and other trade or industrial organizations, bureaus of commercial information, and individual merchants and manufacturers throughout the country, especially such as are engaged in foreign trade.

IV. SPECIAL CONSULAR REPORTS, being series of reports on particular subjects, prepared under special instructions from the Department. The titles of some of them—such as Tariffs of Foreign Countries, Port Regulations in Foreign Countries, Canals and Irrigation, and Money and Prices in Foreign Countries—sufficiently indicate their general character.

V. DECLARED EXPORTS. This is a quarterly publication, giving the articles exported to the United States and their invoice values as declared at the various consulates throughout the world.

For some time past, the fact has been fully recognized that the element of timeliness in getting these reports before the public is of great importance. To this end, every effort has been made to secure the utmost promptitude in publication in the order of their relative value, and in spite of the embarrassment caused until quite recently by an insufficient working force and a meager appropriation, a steady and, I trust, substantial improvement has been effected. Complaints of tardy publication, which, under old conditions, was in many cases unavoidable, are no longer received, and within the past two years, commendation of the celerity with which the reports are printed has come from so many quarters that the Department may be considered as responding satisfactorily to the demands upon it for this class of

information, though the capabilities of its service to commerce and manufactures are still but imperfectly developed.

The actual degree of progress attained is best exemplified by the fact that, as long ago as June, 1895, it had excited the attention of the British chambers of commerce, and, during the past year, it has elicited many complimentary expressions from leading financial, commercial, and industrial journals of Great Britain. In all of these comments, the practical value of the reports of United States consular officers and the promptness with which they are printed and distributed are the points especially dwelt upon. In a circular letter to the chambers of commerce of the United Kingdom, June 19, 1895, the executive council of the associated chambers stated that its attention had been directed "to the action taken by the Government of the United States and by other governments by means of special consular reports, in order to supply their traders with information up to date with regard to openings for business in foreign countries," and the opinion was expressed that the practical value of the reports of British consuls "would be much increased if they afforded more direct and early suggestions and details with respect to trade questions of present interest." The local chambers of commerce were, therefore, invited to make suggestions as to trade inquiries by consuls for submission to the Foreign Office. In the responses to this circular, a variety of changes were proposed for the improvement of the commercial work of the British consular service. At the meeting of the Bradford Chamber of Commerce, the statement was made that United States consuls "did a great deal more" for the extension of trade than British consuls did. The Cardiff chamber complained of the delay in printing the British consular reports. The Hull chamber thought the reports of British consuls should be given to the public as promptly as possible, "if necessary, even by telegraph." The Newport chamber replied to the effect that trained business men should be selected as consuls, and that it was desirable that the system of the United States Government in instructing its consular representatives "to report exhaustively upon trade and commerce, either in their isolated or general phases or developments," should be adopted. These responses were submitted to the British Foreign Office, which, on the 7th of August, 1896, answered the various criticisms and recommendations in an elaborate statement, in which it was asserted that the consular reports were issued "with all possible expedition after their receipt," and that the telegraph was invariably used for the transmission of information of immediate importance. Delays were explained by the statement that reports, after having been put into type, were, whenever possible, returned to the consuls with printers' proofs for correction—a practice, it may be remarked, which is

not followed in publishing the United States consular reports, because of the loss of time necessarily involved. Another reason for the belated character of many of the British reports is to be found in the fact that the consuls do not make their reports, as a rule, oftener than once a year, and even then, they wait until "the necessary statistical data are available in foreign countries." United States consuls, on the other hand, report promptly upon any subject they may think timely and valuable to commerce and industries at home. Even in the preparation of their annual reports, they are required to furnish all the information they can collect from reliable sources by a given date without reference to official statistics, if the latter are not then at hand. This difference in methods would alone serve to explain the elements of superiority in the United States system which seem to commend it so strongly to British trade bodies.

[Here follow extracts from leading trade journals of Great Britain, such as the Iron and Coal Trades Review, March, 1897; the London Financial News, April 17, 1897; the British Trade Review, July 1, 1897; the British Trade Journal, June 1, August 1, and October 1, 1897; the Textile Manufacturer, of Bradford, September 15, 1896; the Consular Journal, of London, September 16, 1897, etc., urging greater promptitude in collecting and publishing British consular reports and the adoption of the salient features of the United States system.]

If we take into consideration the fact that it is only within a recent period that our manufacturers have turned their attention seriously to the export trade and that the consular officers have received the stimulus of such activity, supplemented by special instructions from the Department of State, the results which I have endeavored to indicate would seem to be remarkable. They are such as, in my judgment, foreshadow a great future of usefulness for our diplomatic and consular representatives in extending the sales of every class of American goods, as well as of raw products, abroad. The average American is almost sure to have the business instinct well developed, and added to this is a spirit of enterprise and an energy and dash which give him a great advantage in competition with the slower and more cautious traits of the average European. These are the qualities which, in my judgment, have given the consular service of the United States the superiority so freely admitted by the best opinion in Great Britain. What has actually been accomplished, gratifying though it be, seems to me but an indication of what may easily be done. Thus far, this Bureau has had to work under great disadvantages, and I respectfully call attention to the importance of liberal provision for future development in the interests of American commerce, to which our industries must look for the distribution of their

surplus product. The Bureau, even with its present facilities, has reached the point of reducing, as far as possible, the obstacles and delays to prompt distribution of the information which comes, in steadily increasing volume, from all quarters of the globe. This information is given immediately to the newspaper press, which, through the different news agencies and special correspondents, disseminates the information by telegraph and mail all over the country. The reports are printed as promptly as possible in the monthly publication, CONSULAR REPORTS. A great mass of information is sent out from the Bureau of Foreign Commerce by correspondence in answer to inquiries from individuals and business firms. This latter branch of the work has developed so greatly that the Bureau feels the need of a competent staff to classify data and respond to such inquiries with the least delay. A Division of Information is one of the pressing necessities of the work.

For the present, however, I confine myself to a recommendation which will enable the Bureau to still further minimize the delay in printing and circulating the reports. By a simple and inexpensive change in the methods of publication, it will be possible to print the reports day by day as they come into the Department, and issue them promptly for the benefit of the newspaper press and trade bodies, as well as individual manufacturers and merchants, who are constantly writing to the Department for advance copies of particular reports. It has been the practice of the Bureau, for some time, to issue those of the reports which are of more immediate value in the form of ADVANCE SHEETS, for the special benefit of the classes indicated above. It is difficult, however, to determine in advance the extent of the demand for any particular report, and in order that all requests may be complied with without inconvenience or delay, I have the honor to request your approval of the accompanying order, which authorizes this Bureau to print all reports, as they are received, in a special edition to be known as ADVANCE SHEETS, CONSULAR REPORTS. These ADVANCE SHEETS can be numbered consecutively, with titles by subjects, and by means of a card catalogue, it will be possible to respond to a demand for a particular report at any time. The reports, at the end of each month, can easily be collected and classified for printing in the monthly form, as at present. This latter publication would still be useful for reference purposes and for all those who do not attach importance to the early receipt of the data it contains.

The proposed change involves an increased cost of only about twelve hundred dollars per annum, owing to the fact that the additional expense will be merely that of paper and presswork, and, perhaps, additional help in the mailing department. The change, on

the other hand, will insure economy and promptness in answering requests for information and in supplying the newspaper press (a most important agency for the distribution of this information) with the full reports of the consuls at the earliest possible moment, and will encourage consular officers, by the speedy publication of their reports, to put forth their best efforts in this direction. As to the latter result, I may remark that the increase of interest among consular officers in the commercial work of the Department is very perceptible of late, and that the annual reports to be printed in COMMERCIAL RELATIONS, which I hope to have ready by the 1st of January, 1898, promise to be superior to any that have yet been obtained. If the proposed system be adopted, I am satisfied that the Department will have exhausted the possibilities of prompt publication and efficient distribution of commercial reports, and that we need fear no possible rivalry on this point from any of our competitors for foreign trade. If the present work of the consular service in transmitting commercial information by mail could be supplemented by the use of the cable when necessary, in order to advise American manufacturers and merchants of important events in industry and commerce, nothing, it seems to me, would be left to be desired in this branch of the work. It will, of course, be for Congress to determine whether provision shall be made for such extension of the present system, and also for additional facilities which are sorely needed for the development of other features of the work.

Respectfully yours, FREDERIC EMORY,
Chief, Bureau of Foreign Commerce.

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VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to April 1, 1898, have been prepared to assist in computing the values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz, (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*	Gold and silver	Peso	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†	Gold	Crown	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver	Franc	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil	Gold	Milreis	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	do	Dollar	1.00	
Chile	do	Peso	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica	do	Colon	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver	do	.92,6	Gold—doubloon ($5.01,7); silver—peso.
Denmark	Gold	Crown	.26,8	Gold—10 and 20 crowns.
Egypt	do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland	do	Mark	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver	Franc	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark	.23,8	Gold—5, 10, and 20 marks.
Great Britain	do	Pound sterling	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece	Gold and silver	Drachma	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	do	Gourde	.96,5	Silver—gourde.
Italy	do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Japan‡	Gold	Yen	.49,8	Gold—1, 2, 5, 10, and 20 yen.
Liberia	do	Dollar	1.00	
Netherlands§	Gold and silver	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar	1.01,4	Gold—$2 ($2.02,7).
Portugal	do	Milreis	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖	do	Ruble	.77,2	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain	Gold and silver	Peseta	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway	Gold	Crown	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver	Franc	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela	Gold and silver	Bolivar	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

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* In 1874 and 1875, the gold standard prevailed in the Argentine Republic.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ended July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

‡ For particulars as to the change from silver to the gold standard, see CONSULAR REPORTS No. 201, p. 259.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

‖ Russia: Gold the nominal standard; silver the actual standard.—*Note by the United States Treasury.* See, also, review of Russian industries and commerce by the Russian Minister of Finance in "Review of the world's commerce," Commercial Relations of the United States for 1895-96, p. 230.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6	....	....
China	Silver	Haikwan tael	1.61	1.61	....	....	....	....
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	....	....	4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	....	....
	Silver		....	....	....	....	.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	....	....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso	....	....	....	.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	....	....	.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

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* The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

† The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1895.				1896.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.45,5	$0.44,1	$0.48,6	$0.48,6	$0.49,1	$0.49,3	$0.49,7	$0.49
Central America.	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
China	Amoy tael								.79,3
	Canton tael								.79
	Chefoo tael	.70,4	.68,3	.75,1	.75,2	.75,9	.76,3	.76,9	.75,8
	Chinkiang tael								.77,4
	Fuchau tael								.73,3
	Haikwan tael	.74,9	.75,6	.80	.80	.80,8	.81,2	.81,9	.80,6
	Hankow tael								.74,2
	Ningpo tael								.76,2
	Niuchwang tael.								.74,3
	Shanghai tael	.67,3	.65,2	.71,8	.71,8	.72,5	.72,9	.73,5	.72,4
	Swatow tael								.73,2
	Takao tael								.79,8
	Tientsin tael	.71,4	.69,2	.76,1	.76,2	.76,9	.77,3	.78	.76,8
Colombia	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Ecuador	do	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
India	Silver rupee	.21,6	.21	.23,1	.23,1	.23,3	.23,4	.23,6	.23,3
Japan	Silver yen	.49,1	.47,6	.52,4	.52,4	.52,9	.53,2	.53,2	.52,8
Mexico	Silver dollar	.49,5	.47,9	.52,8	.52,8	.53,3	.53,6	.54	.53,2
Persia	Silver kran			.08,9	.09	.09	.09,1	.09,2	.09
Peru	Silver sol	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Russia	Silver ruble	.36,4	.35,3	.38,9	.38,9	.39,3	.39,5	.39,8	.39,2
Tripoli	Silver mahbub	.41,1	.39,8	.43,8	.43,8	.44,3	.44,5	.44,9	.44,2

Countries.	Monetary unit.	1897.				1898.	
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.
Bolivia	Silver boliviano.	$0.47,4	$0.46,8	$0.44,3	$0.41,2	$0.42,4	$0.40,9
Central America	Silver peso	.47,4	.46,5	.44,3	.41,2	.41,4	.40,9
China	Amoy tael	.76,7	.75,7	.71,7	.66,4	.68,5	.66,2
	Canton tael	.76,5	.75,5	.71,5	.66,4	.68,3	.66
	Chefoo tael	.73,3	.72,4	.68,6	.63,7	.65,5	.63,3
	Chinkiang tael	.74,9	.73,9	.70	.65,1	.66,9	.64,6
	Fuchau tael	.70,9	.70	.66,3	.61,6	.63,4	.61,2
	Haikwan tael	.78	.77	.73,1	.67,8	.69,7	.67,3
	Hankow tael	.71,7	.70,8	.67,1	.62,3	.64,1	.61,9
	Ningpo tael	.73,7	.72,8	.68,9	.64	.64,3	.63,6
	Niuchwang tael.	.71,9	.71	.67,2	.62,5	.65,9	.62
	Shanghai tael	.70	.69,1	.65,5	.60,8	.62,6	.60,4
	Swatow tael	.70,8	.69,9	.66,2	.61,5	.63,3	.61,1
	Takao tael	.77,2	.76,2	.72,2	.67	.66	.66,6
	Tientsin tael	.74,3	.73,4	.69,5	.64,6	.66,4	.64,1
Colombia	Silver peso	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9
Ecuador	do	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9
India *	Silver rupee	.22,5	.22,2	.21,1	.19,6	.20,1	.19,1
Japan	Silver yen	.51,1	.50,5				
Mexico	Silver dollar	.51,5	.50,8	.48,2	.44,6	.46	.44,4
Persia	Silver kran	.08,7	.08,6	.08,2	.07,6	.07,8	.40,9
Peru	Silver sol	.47,4	.46,8	.44,3	.41,2	.42,4	
Russia	Silver ruble	.37,9	.37,4				
Tripoli	Silver mahbub						

* The value of the rupee to be determined by consular certificate.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Dun	Japan	1 inch.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	4 yards.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Kota	Japan	5.13 bushels.
Korree	Russia	3.5 bushels.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	11⅜ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1½ acres.
Do	Nicaragua and Salvador	1.727 acres.
Marc	Bolivia	0.507 pound.
Maund	India	82 2/7 pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Milla	Nicaragua and Honduras	1.1493 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	3.6 feet.
Seer	India	1 pound 13 ounces.
Shaku	Japan	10 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.
Vara	Argentine Republic	34.1208 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Castile	0.914117 yard.
Do	Central America	32.87 inches.
Do	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

THE BUREAU OF FOREIGN COMMERCE.

From and after July 1, 1897, the Bureau of Statistics, Department of State, will be known as the Bureau of Foreign Commerce, in accordance with the following order of the Secretary of State:

DEPARTMENT OF STATE,
Washington, July 1, 1897.

Under the authority conferred upon me by chapter 268, United States Statutes at Large, Fifty-fourth Congress, second session, under the heading "Publication of Diplomatic, Consular, and other commercial reports," the name of the Bureau of Statistics of this Department is hereby changed to the Bureau of Foreign Commerce, and the title of the Chief of the Bureau of Statistics shall hereafter be Chief of the Bureau of Foreign Commerce.

JOHN SHERMAN,
Secretary of State.

The reasons for the change are set forth in the following report from the Chief of the Bureau of Statistics to the Secretary of State:

DEPARTMENT OF STATE,
Washington, June 30, 1897.

Honorable JOHN SHERMAN,
Secretary of State.

SIR: I have the honor to call your attention to the clause in the diplomatic and consular appropriation bill for the fiscal year ending June 30, 1898, approved February 20, 1897, which provides for the publication of diplomatic, consular, and other commercial reports. (See page 590, United States Statutes at Large, Fifty-fourth Congress, second session.) The paragraph reads as follows:

> Preparation, printing, publication, and distribution, by the Department of State, of the diplomatic, consular, and other commercial reports, twenty-five thousand dollars; and of this sum the Secretary of State is authorized to use not exceeding three thousand one hundred and twenty dollars for services of employees in the Bureau of Statistics, Department of State, in the work of compiling and distributing such reports, and not exceeding two hundred and fifty dollars in the purchase of such books, maps, and periodicals as may be necessary to the editing of diplomatic, consular, and other commercial reports: Provided, That all terms of measure, weight, and money shall be reduced to, and expressed in, terms of the measure, weight, and coin of the United States, as well as in the foreign terms; that each issue of consular reports shall not exceed seven thousand copies: And provided further, That the Secretary of State be, and he is hereby, authorized to change the

name of the Bureau of Statistics to the Bureau of Foreign Commerce, and that the foregoing provision shall apply with the same force and effect to the Bureau of Foreign Commerce as to the Bureau of Statistics.

You will perceive that the Secretary of State is authorized by the foregoing to change the name of the Bureau of Statistics of this Department to the Bureau of Foreign Commerce, and that the provision for the maintenance of the Bureau of Statistics is made to apply with the same force and effect to the Bureau of Foreign Commerce. As the appropriation becomes available on the 1st of July, I respectfully ask authority from you to carry the legislation specified into effect. The reasons for making the change, as stated to Congress and approved by that body, are:

(1) The confusion arising from the fact that there are three bureaus of statistics in the Executive Departments, viz:

Bureau of Statistics, Department of State;
Bureau of Statistics, Treasury Department;
Division of Statistics, Department of Agriculture.

Shortly after taking charge of this Bureau, I became impressed with the fact that the general public was unable to discriminate between the various bureaus of the same name, and that unnecessary labor and delay resulted.

(2) The name Bureau of Statistics does not properly denote the functions of this Bureau, which is exclusively commercial in its character, its work being that of collecting, compiling, and distributing the commercial reports of our diplomatic and consular officers. There is a wide range of statistics with which the Bureau has nothing to do, and its designation as a Bureau of Statistics is, therefore, misleading. The use of the words Bureau of Foreign Commerce, on the other hand, besides correctly indicating the character of the work, is likely, in my judgment, to impress upon the public mind the importance of the commercial functions of this Department.

In view of these considerations, I submit the draft of an order for your signature.

Respectfully yours,

FREDERIC EMORY,
Chief, Bureau of Statistics.

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CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

Vol. LVII. JUNE, 1898. No. 213.

FROZEN-MEAT TRADE OF AUSTRALASIA AND THE ARGENTINE.

The following reports are replies to an instruction, dated September 15, 1897, sent from the Department of State, at the request of the president of the National Wool Growers' Association, to the consuls in Australasia and the Argentine Republic:

AUSTRALASIA.

NEW SOUTH WALES.

NEWCASTLE.

There is but one establishment of any importance in the portion of the colony of New South Wales which is embraced in this consular district (Newcastle), and this will consequently be made the basis of my report. The industry is, however, an important one in the adjoining colony of Queensland, and I inclose a report on the subject by Consular Agent Weatherill, of Brisbane, giving a comprehensive survey of the matter.

The establishment forming the basis of my report is situated at Aberdeen, a small town on the Great Northern Railway, about 80 miles north of Newcastle. The plant was completed and the works started toward the end of the year 1891, the first foreign shipment being made on February 8, 1892. Since that time, the works have been running steadily, with the exception of one or two short stoppages, owing to drought or to the necessity of duplicating some part of the machinery. At the present time, the capacity of the plant is taxed to the utmost, with a good outlook for the future. The machinery used consists of two Haslam dry-air engines and one Haslam ammonia engine, the three netting a combined daily output of 100 head of cattle and 1,500 sheep, or 2,500 head of sheep alone.

The company never buys in the open market, but always by private contract; so that it is impossible to ascertain the prices paid for the stock treated at the works. When chilled and packed ready for export, however, it is valued at an average of about 2d. (4 cents) per pound.

In order that the meat, when ready for market, may be in the best possible condition, the supplies of stock, which are obtained from all parts of New South Wales, as well as from southern Queensland, are invariably driven to the nearest railway station and trucked thence direct to Aberdeen.

In addition to the freezing machinery, the company has very large storage accommodations where the chilled meat is kept until a sufficient quantity has accumulated, when a shipment is made. Thus far, almost the entire output has been exported direct to London, the exceptions being three shipments to South Africa and one to Malta; but the company is now making arrangements for sending further consignments to Africa, and will shortly make a trial shipment by sailing vessel to Cape Town. At present, each carcass, haunch, or quarter, as the case may be, is sewn in a neat calico wrapper before leaving the works, whence it is shipped by rail in specially constructed cars to Newcastle. Here it is taken to the steamer, which is built specially for the trade, and conveyed direct to London, the freight varying from half a penny to 3 farthings (1 to 1½ cents) per pound from Newcastle to London.

The largest single shipment the company has yet made consisted of 35,000 carcasses of mutton, besides some sundries.

The total export of the works for the year 1897 was: Mutton, 138,833 carcasses; kidneys, 790 cases; beef, 9,159 quarters; and a few cases of sweetbreads, ox tails, etc., the whole valued at $360,000, approximately.

The company owning the works, and known as the Australian Chilling and Freezing Company, has a capital stock of £80,000 ($389,320) and employs from 200 to 250 hands, the weekly pay roll amounting to about $2,000.

All by-products are saved and sold, a ready market being found locally for all blood manure and tallow produced. The hides and bones are also sold locally, but the greater portion is exported by those who buy them.

In addition to the freezing operations, canning and tiercing are carried on to a considerable extent at the works, these branches of the industry being found to pay well in connection with the chilling plant.

There are two other very small freezing plants in the northern district of New South Wales, but very little, if any, of their output finds its way direct to foreign markets; consequently, they have not been considered.

W. C. BROWN,
Consul.

NEWCASTLE, N. S. W., *February 8, 1898.*

SYDNEY.

In response to Department's instruction dated September 15, 1897, I submit the inclosed report. Coming from the very best available authority, it will be more valuable if presented as furnished by the author.

Mr. Featherstonhaugh is an acknowledged authority and has studied the meat question in America and Europe, as well as in Australia.

GEO. W. BELL,
Consul.

SYDNEY, *December 3, 1897.*

FROZEN-MEAT INDUSTRY OF NEW SOUTH WALES.

Inception.—The first shipment of frozen meat from Australia was made in 1880 from Melbourne, but after this experimental shipment of about 400 sheep, little was done in this trade until 1890, when over 200,000 sheep were exported from New South Wales.

Progress.—The history of the trade from that date has been one of steady progress, as will be seen from these figures, showing the exports of frozen mutton from the colony:

	Carcasses.
1891	334,700
1892	450,000
1893	610,000
1894	870,000
1895	900,000
1896	1,200,000
1897 (eleven months)	743,982

Present condition.—The trade is still a growing one, and, in spite of a succession of dry seasons, which have had the effect of reducing our flocks by 33 per cent since 1892–93 (62,000,000 to 40,000,000), we have kept on steadily increasing our output from 450,000 carcasses in 1892 to 1,200,000 carcasses in 1896; and, when we again breed up to what the colony can fairly carry (in its present state of improvement, viz, about 56,000,000 sheep), it is very certain we shall export at least 2,000,000 frozen sheep and lambs every year. We have an average surplus of about

5,000,000 sheep over and above what can be used for local requirements and ordinary decrease, and of these about 2,000,000 will be exported in the shape of frozen mutton, and the balance will be converted into canned meat, extract, and tallow. Boiling down sheep for their tallow only is almost a thing of the past and should not be tolerated, as either canning or extract, in addition to boiling, adds from 8d. to 1s. (16 to 24 cents) per head to the net return from a sheep.

At present New South Wales is greatly understocked. We have only about 40,000,000 sheep in the colony, not yet having got over the effects of a series of dry seasons. We are now suffering from an unusually hot and dry spring; water is scarce in many parts of the colony, and there is no feed to spare. The frozen-meat trade is at the present date in a depressed state, and at the prices sheep fit for export can be purchased in Sydney, viz, $1\frac{3}{16}$d. to 1¼d. (2.19 to 2½ cents) per pound, exporters would be taking too great a risk, as values in London are only 2⅜d. (4.375 cents) per pound, and it costs 1⅛d. (2¼ cents) to freeze, ship, and sell in London from Sydney, leaving no margin for risk or profit. At the same time our surplus sheep must go—we must export on an average some 4,000,000 to 5,000,000 sheep a year, and it pays better to sell prime frozen mutton at 2½d. (5 cents) in London than to boil, preserve, and make extract of such sheep. Our old ewes and inferior sheep must be treated by the last-named methods.

Present value of frozen-meat trade.—Say 1,500,000 sheep, averaging 50 pounds, at 2½d. (5 cents) at London (10s. 5d. per sheep), £750,000 ($3,645,000) per annum. When we export 2,000,000 per annum, as we certainly shall, the trade will represent £1,000,000 ($4,866,500) per annum in London. The net return to the grower at 2½d. (5 cents) in London for the meat would be about 1d. (2 cents) a pound, or 4s. (97 cents) per sheep. The owners would also get the skin and inside fat, tongue, etc., worth on an average—that is, when the sheep has 6 months' wool on—about 3s. (73 cents) net.

Supply.—The supply is intermittent; still we have shown, during the last three years of drought, that we can keep it up. There are always some portions of the colony where sheep will fatten. The sheep are, with the exception of some 500,000 imported from Queensland over the border, all grown and raised in New South Wales. The cattle are mostly raised in Queensland and fattened in New South Wales. Sheep are (Merino wethers and ewes) from 3 to 5 years old when killed. Crossbreds are usually killed as lambs and up to 24 months old; when older the flesh darkens.

Cost of meat at refrigerating stations.—At inland works, 350 miles from port, dressed mutton is usually worth 1d. (2 cents) a pound; but that price can not be given if it has to be sold in London at 2½d. (5 cents), as it costs 1½d. (3 cents) to kill, freeze, ship, and sell in London.

Machinery.—The refrigerating machines chiefly used in New South Wales are those made by the Hercules Ice Machine Company in the United States. The Stockowners' Meat Company of New South Wales, Limited, alone has five of these machines, and other companies three or four. The Linde machine (made in England) is also used and approved, and some De La Vergne machines (made in England); but the Hercules is in most favor, and the most economical in first cost and in working cost.

Preparation for export.—About half of our sheep exported are killed at or near port, at once frozen, and, after from a week to a month in cold storage, are shipped. A considerable number is killed and frozen inland at from 90 to 200 miles and shipped, some at Newcastle and some via Melbourne. A large number of sheep is killed 360 to 500 miles inland and there chilled, then railed in insulated cars to Sydney, where they are hard frozen preparatory to being shipped. The cost of freezing and bagging is one-half a cent per pound. Freight, for the most part, can be put at 1 cent per pound, and never over 1¼ cents. The cost of selling in London runs from one-half a cent to six-tenths of a cent per pound; insurance about seventeen-hundredths of a cent per pound.

There have been great complaints of damage during the last two and a half years. This, it is believed, occurred chiefly in the ships, from the insulation becoming defective and from carelessness in allowing the temperature to rise and to fluctuate. This matter of damage has reached an acute stage, and a conference is to be held shortly between shippers, insurance agents, and shipowners, in order that steps may be taken to neutralize these losses.

Most of our mutton goes to London; a little to Manchester. Considerable quantities go to South Africa, Malta, etc. Frozen meat can be delivered in South Africa in twenty-eight days.

Capital invested.—More than £600,000 ($2,919,900) is invested in land, buildings, machinery, and plant in the frozen-meat business in New South Wales, and one firm is now increasing its accommodations; but, on the whole, the colony is more than fully provided with freezing works. The freezing works in New South Wales are capable (if fully employed all the year round) of putting through 3,000,000 sheep annually. The works where sheep are canned and extract made in addition to extracting tallow have a capacity of about 2,000,000 a year, and there are a number of works, where stock can be only boiled down for their tallow, capable of dealing with some 10,000,000 sheep annually, in addition to the freezing, canning, and extract works.

Wages.—The work is intermittent. Butchers get $4.86 for killing and dressing 100 sheep; offal men, 97 cents per 100 sheep; laborers, 36s. to 42s. ($8.76 to $10.21) per week; engineers, 50s. to 80s. ($12.16 to $19.46) per week.

By-products.—These are now being well utilized. The blood is put through driers (American make) and brings £5 ($24.33) per ton for an average of 15 per cent of ammonia. Bone dust brings at present £4 ($19.46); other fertilizers, £3 10s. ($17.01) to £3 17s. 6d. ($18.86). These are very scarce at present. The runners are used for casings, and go to the United States and Germany. The tank water is now being dried and evaporated, and the result from this sells at 90s. ($21.90) per ton.

Frozen beef.—The frozen-beef trade of New South Wales is so small as to be scarcely worth notice. Queensland is the only Australian colony that exports beef in any quantity. New South Wales exported during the six years 1889–96, the following numbers of cattle, averaging 700 pounds each:

1889	50
1891	100
1893	550
1894	2,100
1895	16,600
1896	2,450

Thus the colony, during the whole six years, exported only 21,850 head of cattle. The number of cattle in New South Wales is only about 2,000,000. The yearly increase is about 400,000, and about 100,000 are imported annually from Queensland.

Prime dressed beef is worth at present date (December 1, 1897), 2d. to 2⅛d. (4 to 4½ cents) per pound at the government meat markets; hinds, prime, 2½d. (5 cents); fores, 1½d. to 1¾d. (3 to 3½ cents). Beef is rather higher than usual and is not likely to come down. In Queensland, prime beef is not worth over 8s. 6d. ($2.04) per 100 pounds at the works.

C. FEATHERSTONHAUGH,
Managing Director Stockmen's Meat Company of New South Wales.

SYDNEY, *December 1, 1897.*

NEW ZEALAND.

The frozen-meat industry of New Zealand has developed with extraordinary rapidity, and has attained such magnitude as to make its projectors proud. It was started by New Zealanders in 1882, who formed the original freezing companies. Its present dimensions have been attained by private enterprise alone, and to this enterprise the magnificent fleets of steamers now engaged in this trade between New Zealand and England owe, in a great measure, their existence. It can hardly be said that the introduction of frozen meat into the London market from Australasia had advanced beyond an experimental stage until about 1881, during which year about 17,000 carcasses of frozen mutton were shipped to London from Australia, and also a limited amount of beef. It is said that only about one-third of this shipment reached London in good condition, the other parts being described as irregular in condition and unsatisfactory. In 1882, two shipments of frozen meat were made from New Zealand, comprizing about 9,000 carcasses, which reached their destination in good condition. A small quantity of beef and about 130,000 carcasses of mutton were shipped to England from New Zealand, while only one-half that amount was shipped from Australia. The New Zealand and Australian Land Company carried in the Shaw Savil Company's ship *Dunedin*, from Port Chalmers, New Zealand's first shipment of frozen meat to London. The vessel was fitted with a Bell-Colman machine, and the success of this shipment sounded the keynote, as it were, for the almost simultaneous erection of freezing works in Dunedin, Christ Church, Wellington, Auckland, and Napier; from which time the history of this trade has been a continued advance, with scarcely a drawback, to the present time.

Forty-three meat freezing, preserving, and boiling down establishments were returned for the colony in 1896, being exactly the same number as in 1891. The hands employed increased from 1,568 to 2,037 in five years; 52 of the hands working in 1896 were females. The wages paid also increased from $673,811 in 1890 to $879,742 in 1895. The carcasses of sheep and lambs frozen increased by 631,624, besides which 2,463,406 pounds weight of legs of mutton were frozen in 1895; but in frozen beef there was a great falling off. The chilled beef, however, shows development from 500,000 pounds in 1890 to 778,775 pounds in 1896. In the preserved meats there has been a fall in the product from 6,291,278 pounds to 4,999,640 pounds. The preparation of corned beef has ceased altogether since 1890, but tallow shows an increase of 3,888 tons.

Table showing the number of works, employees, wages paid, power used, value of products, etc., in the census years 1891 and 1896.

Description.	1891.	1896.
Number of works	43	43
Employees:		
Males	1,561	1,985
Females	7	52
Wages paid:		
Males	$673,095	$878,262
Females	$715	$1,479
Motive power:		
Steam	39	42
Water	1	3
Hand	4	....
Horsepower	5,112	7,492
Product:		
Sheep and lambs, frozen ... number	1,730,911	2,362,535
Do ... value	$4,652,549	$5,905,785
Beef, frozen ... pounds	19,153,419	1,175,720
Do ... value	$951,625	$61,216
Chilled beef ... pounds	500,000	778,775
Do ... value	$19,466	$43,049
Preserved meat ... pound	6,291,278	4,999,640
Do ... value	$594,842	$361,916
Tallow ... tons	7,070	10,958
Do ... value	$702,148	$838,546
Corned beef ... casks	6,339	....
Do ... value	$68,160	....
Bone dust ... tons	2,703	3,248
Do ... value	$75,353	$57,741
Oil, neat's-foot, etc ... gallons	10,575	15,067
Do ... value	$9,782	$10,205
Bones, horns, and hoofs ... tons	3,059	113
Do ... value	$31,583	$915
Other manures ... tons	....	2,206
Do ... value	....	$45,862

The approximate value in 1896 of land was $328,508; of buildings, $1,587,269; of machinery and plant, $1,544,252.

The present condition of this trade is good, as will be seen by the following table, which gives the total exports for each year, since the commencement of the trade:

Year.	Pounds.	Year.	Pounds.
1882	1,707,328	1890	100,934,756
1883	9,853,200	1891	110,199,082
1884	28,445,228	1892	97,636,557
1885	33,204,976	1893	100,262,453
1886	38,758,160	1894	114,827,216
1887	45,035,984	1895	127,018,864
1888	61,857,376	1896	123,576,544
1889	73,564,064		

In the year 1896, 123,576,544 pounds, valued at $6,092,823, were shipped from this colony; but to ascertain the total value of the entire meat export for the year, we must take into consideration the value of frozen meats, as already stated; the value of preserved meats, $368,204; of salted beef and pork, $29,778; of bacon and hams, $89,383, in addition to the $6,092,544 mentioned.

MACHINERY.

For ten or twelve years the work of refrigeration was carried on by compressed-air machines, the Bell Colman being the first one in use; later on, this was followed by the "Haslam" machine, which was considered better. This machine was, for a time, in general use in most freezing works of New Zealand and in a majority of the meat-carrying steamers; but Hall, Goodfellow, and Lightfoot machines are also in use, and have given satisfactory results. To those who are unfamiliar with these matters, the following descripton of these machines may be of interest.

Connected directly with the steam engine are cylinders, in which air is compressed to a pressure of about 50 pounds to the square inch; the result of this pressure is to heat the air to a high degree, and the temperature is reduced by passing it between pipes, through which cold water is circulated by pumps. The air thus cooled, but still compressed, passes between another set of pipes, which are cooled by the air returning from the freezing chambers, and by these means its temperature is still further reduced, while it is also caused to deposit its moisture, thus reducing the quantity of snow, which it deposits in the freezing chambers at a later stage in its course. The compressed air is then returned to the expansion cylinders of the engine, and by its expansive force assists to drive the machine, returning, in fact, to the engine about two-thirds of the power expended in compressing it. As the air leaves the expansion cylinders expanded to its original volume, the absence of the heat extracted from it, when in a compressed state, causes the most intense cold, and the air frequently leaves the ports at a temperature of 70° below zero. From the engine, it is circulated through the freezing chambers by a reticulation of large wooden boxes, or pipes, until, having finished the circuit, it returns to the engine at a much higher temperature and is again compressed, cooled, and expanded, to repeat the same circle. Thus, at every stroke the engine simultaneously sends out a fresh supply of cold air, and drives into the compressors a fresh charge of the air which has performed its task. I will state here that with all types of refrigerating machinery the heat abstracted is carried off by water, so that the first essential is a good supply of water, and the lower its temperature the better will be the results. It will be understood, therefore, that with all refrigerating machines the consumption of fuel will increase and decrease with the temperature of the water available for circulation. Several of the freezing companies of New Zealand have, within the past few years, erected machinery for freezing by the compression of ammonia, and in others of anhydrous carbonic-acid gases.

It is claimed by those in a position to know that the advantage which the ammonia and carbonic-anhydride processes have over the compressed-air machine is in the economy of fuel and the consumption of coal, which, it is claimed, can be reduced by at least one-half; and it is believed that in the future the preference will be given to the former, wherever new works are to be erected. By this process, the specific gas is compressed instead of air, and it is heated by compression, and the heat so generated is abstracted by water in the same way as with the compressed air, the result being that the gas becomes liquefied. Its escape is regulated by valves, and it volatilizes and expands in its passage through a series of coils, which are immersed in a solution of chloride of calcium. This solution does not freeze at the temperature required for freezing meat, and is therefore technically described as brine. The expansion of the gas in the coils reduces the temperature of the brine to a very low degree—considerably below zero, if necessary—and the brine thus cooled is either applied by circulation through the freezing chambers in the pipes or hollow iron walls, or is brought into actual contact with large volumes of air circulated through the chambers by fans. There are some ammonia systems, however, where the gas circulates through the pipes in the freezing chambers, reducing its cooling effect upon the air, without the intervention of brine. In all machines, however, which operate by the compression of gas, the gas, after being compressed, cooled, and expanded, returns to the compressors to do duty again, so that there is no loss, except through leakage or accident. All of the various processes herein mentioned have been thoroughly effective for the purpose of freezing meats and have, of course, especial advantages as well as disadvantages, the opinions varying as to which is the best and most economical.

BY-PRODUCTS.

The collateral industries which are carried on in connection with the large freezing establishments in New Zealand are scarely less important than the freezing works themselves. There are the tallow works, both for fine edible tallow and the ordinary tallow of commerce; fellmongeries, meat-tinning works, sausage skin, violin-string factories, and manure works. The best and latest appliances are used in the same, but can not well be described within the limits of this report. Suffice it to say, however, that gradually every waste product is utilized; not for economy's sake alone, but to provide for the rapid removal and manipulation of vast animal matter, thus insuring the most perfect sanitary conditions possible, without which the slaughtering of thousands of animals daily could not be satisfactorily carried on. At some of the freezing establishments in New Zealand there is absolutely nothing thrown away; all waste matter is converted into manure within twenty-four hours after the animal is slaughtered, and many hundreds of tons of the various classes of manures can be seen stacked in sacks, in a perfectly inoffensive state. The whole of these manures is sold in the colony, and every part of the slaughtered animals which is not exported goes back to renovate the soil, and is thus made to contribute its proper part in the great economy of nature.

SHEEP RAISING IN NEW ZEALAND.

The present number of freezing works (for freezing only) in New Zealand is twenty-one, of which twelve are in the North Island and nine in the South Island. These works have a capacity, collectively speaking, of freezing 4,000,000 or more of sheep per annum, if steadily employed throughout the year. The steamers have not been able in the past to carry the meat, during the busy season, as fast as it is frozen; and in consequence thereof a great deal is stored in the works.

COST.

The charges for preparing, freezing, and shipping meat have gradually been reduced from 1 cent per pound to three-fourths of a cent, and in some few instances to even less. The total expenses upon mutton, including slaughtering, freezing, freight, insurance, and London charges, average slightly less than 4 cents per pound.

NUMBER OF VESSELS.

The number of vessels now employed in the New Zealand meat trade is thirty-six, of which six are sailing ships; their total carrying capacity is about 3,000,000 sheep per annum.

NEW ZEALAND SHEEP.

New Zealand, with its temperate climate and well-watered pastures, is doubtless better adapted for the production of crossbred sheep than either New South Wales or Victoria, and, although the latter are already crossing their Merinos with long-wool sheep, it is doubtful if they will be able to produce in any large quantity the class of mutton which commands the highest price in England. The practice which gradually came into vogue in New Zealand of producing sheep suitable for the English market at the age of 18 months has had the effect of increasing the proportion of its flocks which can be annually exported. Flock masters in the Middle Island have utilized the advantages which they possess in their large areas of arable land, by growing turnips, oats, and other crops available for winter feeding, and are able to produce more of the most suitable class of sheep and lambs for export than would be possible if they relied solely upon grass. This system has also enabled them to ship during the winter, and thus distribute their output throughout the year. In the North Island the proportion of land which can be brought under the plow is less, while the grass is good for a longer period of the year. The result is that less artificial feed is grown and comparatively few sheep are fattened during the winter, while, naturally, only a small proportion of the two-toothed sheep are sufficiently forward for export. The following extract from Mr. Brydone's speech, delivered a few years ago, gives a clear idea of the system which has been found the best in the Middle Island, and which has resulted in giving "Canterbury" mutton the premier place in the market:

> Breeders differ widely in their opinions, and most generally favor the sheep they have been accustomed to. A good deal also depends upon the nature of the country, as one breed of sheep would thrive well where another would starve. We have had considerable experience in breeding crossbred sheep in Canterbury and Otago during the last quarter of a century, and, having experimented with the most popular breeds, the result of our experiments has taught us to favor the Border Leicester cross, as the most profitable all round. The Border Leicester, as now produced in New Zealand, is a very different sheep from the home Leicester, as he has been bred with an eye to producing wool as well as mutton, whereas at home they look principally for the carcass. We put the Border Leicester ram with the Merino ewe, which produces a sheep carrying a profitable fleece and fattening early, and afterwards we use the Leicester, excepting with ewes that may be light in their wool, and to these we put the Lincoln ram. The Canterbury farmers who breed for export mostly favor the Lincoln blood, although a few still prefer the Lincoln and Downs. In the North Island, Lincoln and Romneys have been most in favor, and that may account for the difference in price between Canterbury and Wellington mutton.

In conclusion, it may be remarked that this is an inexhaustible subject, and I have treated only points that I think will be of interest and profit to the frozen-meat industry in the United States; and in the preparation of same I have been greatly assisted by figures and facts supplied by government officials, the Honorable Mr. Sladden and others, whose courtesies I hereby most gladly acknowledge.

FRANK DILLINGHAM,
Consul.

AUCKLAND, *December 24, 1897.*

VICTORIA.

The inception of this trade dates from the year 1889–90, when a sum of money was set aside by the parliament of Victoria to promote the dairy, fruit, and wine industries of the colony.

In the first instance, attention was solely confined to dairy produce; but in the year 1893–94 operations were extended to mutton, and a few rabbits and poultry were also shipped.

The industry practically consists of only two articles of export—butter and mutton—the largest exports in minor products being those of rabbits and hares ($384,774) and poultry and eggs ($24,877) in 1896.

Of the two principal articles of refrigerated exports from the colony, butter is much the more important, as will be seen by the following officially compiled table:

Exports of butter from Victoria.

Year.	Quantity.	Value.
	Tons.	
1889–90	369¼	$249,650
1890–91	754¼	443,824
1891–92	2,139½	1,094,962
1892–93	3,613½	1,968,168
1893–94	7,652¼	3,704,735
1895–96	9,386	4,263,180
1896–97	9,895	4,585,445

The exports of frozen meats from the colony since the year 1893 are shown in the following table, kindly furnished by the collector of customs at this port, which shows the growth of the industry to the present time:

Exports of frozen meats from Victoria.

Year.	Quantity.		Value.
	Cwts.	*Pounds.*	
1893	54,031	6,051,472	$364,335
1894	111,922	12,535,264	617,777
1895	177,842	19,918,304	942,714
1896	192,003	21,504,336	871,298

These exports consist mostly of mutton, the quantity of beef and pork included being very small.

The industry is partly supervised by the government of Victoria, and persons desiring to export frozen produce are required to notify the department of agriculture of the fact, when the requisite space is engaged from the shipping companies. The produce is then forwarded to the government freezing works, a palatial building erected on the banks of the River Yarra, where it is examined by experts, and, in the case of butter, if of approved quality, classified and the case stamped. Rabbits and mutton must also be of approved quality, and require a veterinary certificate of soundness and freedom from organic disease.

The freezing, bagging, packing, and handling are carried on by the government; also the shipping, including payment of freight, which is recovered, together with a charge to cover freezing, bagging, packing, etc., before delivery of the bills of lading to the exporter. These charges are as follows:

Articles.	Charge.	Articles.	Charge.
	Cents.		*Cents.*
Butter.................per box (50 pounds)...	4	Geese.................................per pair...	18
Mutton ....per carcass...	16	Hares...do......	6
Chickens...............................per pair...	10	Rabbits.......................................do......	4
Ducks ....do......	10	Turkeys ....do......	18
Eggs.................................per dozen...	3		

The butter supplies are obtained from the various factories throughout the colony, of which there are two hundred erected at an average cost, inclusive of refrigerating plant, of $15,000 each. These factories, as a rule, are conducted on the cooperative principle. There are also about four hundred creameries scattered throughout the colony, costing some $2,500 each.

Rabbits and hares are obtained from almost every part of the colony, trappers being employed by the exporters.

Sheep are purchased by the exporting companies either in the open markets or direct from the ranch owners, and are killed, frozen, and bagged at their works in Melbourne and other parts of the colony, at a cost varying from 24 to 32 cents per carcass. The mutton is then taken by rail in insulated trucks, cooled by ice, and shipped in the cooled chambers of the ocean-going steamers.

The by-products—skins, intestines, feet, fat, etc.—are utilized in the ordinary manner of slaughterhouses. The tallow is refined in Melbourne and a large quantity exported to England. The intestines are manufactured into sausage casings, of which the United States takes a fair portion.

The wages at these works are: Slaughtermen, $4.86 per 100 sheep; chamber men (freezing, bagging, packing, etc.), $12.16 to $14.59 per week.

There are five companies engaged in the frozen-meat trade in the colony, with a daily capacity as follows:

	Sheep.
Newport Freezing Works..	1,500
Western and Wimmera District Freezing Company..................................	700
Portland and Western District Freezing Company..................................	600
Fresh Food and Frozen Storage Company..	500
Government works..	2,000

The capital invested by these companies and by the government in buildings and machinery is estimated at $1,500,000.

The machinery mostly used in these works is the "Hercules" ice machine, manufactured in the United States, it being thought much superior to the "Linde," an English machine, in use in one or two of the establishments.

Considering the infancy of the industry, much has been done in the colony, and when more capital and enterprise are brought to bear upon it, more particularly as regards butter, it is capable of much further development.

JOHN P. BRAY,
Consul-General.

MELBOURNE, *December 28, 1897.*

QUEENSLAND.

The frozen beef and mutton industry of this colony was established in 1891 by the Queensland Meat Export and Agency Company, Limited, with extensive freezing works at Brisbane and Townsville. The Central Queensland Meat Export Company, Limited, Lakes Creek, Rockhampton—an extensive canning company—added freezing to their works, and in 1896 three additional freezing establishments were added, one at Gladstone, one at Bowen, and one at South Brisbane. The work of the last named is, however, confined to freezing, there being no convenience for slaughtering; and the works are dependent for supplies on country slaughtered and chilled meat.

The yearly capacity of the works, if fully employed, is as follows, the numbers being in cattle or their equivalent in sheep, ten sheep being considered the equivalent of one head of cattle:

	Capacity.
Eagle Farm Works, Brisbane	50,000
Geddes Birt & Co., Brisbane	25,000
Gladstone Works, Gladstone	30,000
Lakes Creek Works, Rockhampton	100,000
Bowen Works, Bowen	50,000
Ross River Works, Townsville	50,000
Total	305,000

None of the works, however, has been pushed to its full capacity, and during the present year two of them have been inoperative for three months, the remainder working only half time during the same period. At present all the works are shut down, in consequence of the drought, but will begin again within the next week or two, as the summer rains have come a month or six weeks earlier than usual, and have broken up the drought.

The quantity of beef actually frozen during 1896 was 50,245,213 pounds. The mutton frozen during the same period was 4,571,086 pounds. The money value of frozen beef exported was $2,289,050 and of mutton exported was $218,440.

By far the larger proportion of the meat treated was frozen and shipped on owners' account, the company making a consolidated charge to cover slaughtering, freezing, shipping, insurance, freight, and storage for a limited time in London. Some of the companies, however, notably the Lakes Creek and Bowen (the latter being leased to Messrs. Bergl & Co., a London butchering firm), purchase direct from the grazier and freeze on their own account. The cost of cattle at the works fluctuates very much, but up to the present the price has not exceeded $1.94 per 100 pounds—*i. e.*, equal to $14.59 for a 750-pound bullock, which may be taken as the general average weight of Queensland cattle. Sheep delivered at works may be given at the average value of $1.46 per head.

At the inception of the industry, the Haslam dry-air system was adopted; but this was found to be much too costly in the working, and now the ammonia process (principally the Linde) has been substituted, the saving in fuel by the change being considerable. The capital invested in the various freezing companies is $2,500,000. The by-products exported during 1896 from all sources were: Bones and bone dust, $43,225; glue pieces, $7,435; hides, $1,268,985; hair, $20,550; hoofs and horns, $42,745; leather, $58,440; manure, $48,185.

Extract of meat exported during 1896 was valued at $263,540.

It would be impossible to separate the labor employed in freezing operations, as canning, extracting, etc., are carried on at the works; but the number of hands employed in the whole of the meat industry in 1896 was 2,838. The labor is generally performed in the form of piecework, and the wages range from $10 to $15 per week.

The cost of freezing, freight, insurance, and storage for thirty days in London is about 3 cents per pound. Cattle in most instances travel to the works on the hoof; but when traveling long distances many are trucked.

Hitherto nearly all the meat exported has been sent to London.

W. J. WEATHERILL,
Consular Agent.

BRISBANE, *January 11, 1898.*

ARGENTINE REPUBLIC.

INCEPTION OF THE INDUSTRY.

The frozen-meat industry was established in the Argentine Republic in 1882, the first exports of frozen meat taking place in 1883, since which time they have progressed steadily. The industry is carried on in four works, viz:

No. 1, established in 1882, is situated at Campaña, some 40 miles north of the city of Buenos Ayres, on the River Paraná.

No. 2, commenced in 1884, is on the south bank of the Riachuelo, a canalized creek, forming the southern limit of the city of

Buenos Ayres. This establishment, formerly a private firm, but now a limited company, has grown steadily. Commencing in a comparatively modest manner, it has, according to reliable information, succeeded in taking one of the most prominent positions in the frozen mutton trade in the world.

No. 3 started in 1886 at San Nicolas, a port on the River Paraná.

No. 4 began work in 1886 at Lima, a railway station on the Buenos Ayres and Rosario line, close to Zarate, a port adjacent to Campaña and likewise on the River Paraná.

In 1885, a frozen-meat industry was started under the auspices of the Argentine Rural Society, the shareholders being principally cattle farmers anxious to find a profitable outlet for their production. Two shipments resulted in heavy losses. The carcasses were of animals of five or six years and of late castration, unfitted for the requirements of the English market, and the freezing process was done on board the steamer, fitted for the purpose, the result proving the error of freezing elsewhere than ashore. The company liquidated. A fresh concern for the preparation and export of frozen meat is now seeking capital to operate in the Province of Buenos Ayres.

CAPITAL.

The total capital of the four factories is declared at $5,934,380 gold, comprising value of land, buildings, machinery, plant, etc. All four are now formed into companies, three working with English and one with native capital.

MACHINERY.

Originally, Nos. 1, 2, and 4 used that employed in the cold-air system, the machines being manufactured by Haslam (Derby, England) and by J. S. E. Hall (London). This system was found to be very expensive; so that almost simultaneously Nos. 1 and 2 discarded both the Haslam and Hall machines to a great extent, adopting principally the system covered by the "Lavergne" patent, owned by Messrs. Stern Brothers of Glasgow. The result, in the case of No. 2, was a reduction in coal consumption from over 15 tons daily to about 3½ or 4 tons. The "Lavergne" system comprises dry air, ammonia, and brine. No. 3 uses German machinery, in what is known as the ammonia process.

The total number of machines in use is 60 (of which No. 2 employs 35), equaling altogether 1,652 horsepower.

LABOR.

The workmen employed number 1,225, and may be classified as foremen, earning $1.50 to $2 gold per day; slaughtermen, skinners, skin dressers, and general workmen, averaging about $1 gold per day.

SUPPLY.

Sheep are procured from the Province of Buenos Ayres, the breeds most sought for being the South, Hampshire, Shropshire, and Oxford Down, Cheviot, and Romney Marsh; also those from native sheep, crossed by Lincoln or Rambouillet. Nevertheless, the best selling results have been obtained in the few cases where pure Hampshire Down could be procured, although it has lately been stated that excellent results are obtained for frozen-mutton purposes from a cross between the Merino and Shropshire black face. Steers are supplied chiefly from the Provinces of Buenos Ayres, Cordoba, and San Juan. The trade is limited, owing to the difficulty in obtaining the class of animal required by the process.

The average weight of the wether, before killing, is 50 kilograms (110 pounds), and when dressed the carcass weighs about 25 kilograms (55 pounds). One notable dressed Hampshire Down carcass, shipped to England by No. 2, scaled 121½ pounds. The steer alive weighs 740 to 750 kilograms (1,731 to 1,757 pounds), and when ready for shipment 370 to 375 kilograms (866 to 876 pounds).

PRICES.

The wether, alive at the factory, costs $2 to $2.30 gold; the steer about $20 gold.

PREPARATION FOR EXPORT.

After separating the heart, kidneys, tongue, etc., leaving only the bare carcass, the meat is subjected to the freezing process, 15° to 20° F. below zero, about 50° of freezing being applied. When thoroughly hard, the carcass is sewn up in thin cotton cloth and transferred to the refrigerating chambers in steamship. At Campaña and San Nicolas the steamer receives alongside; in the Riachuelo, two small steamers transship, and at Zarate it is received by trolly in refrigerated car.

The system of chilling, instead of freezing, is on trial and requires, I understand, only 4° F. below freezing point. From one company, I learn that experiments with this system have failed, owing to the temperature on crossing the Equator. The advantage of the chilling system is that the meat preserves its natural condition.

Frozen meats are free of export duties.

FREIGHTS.

Two of the companies ship in steamers belonging to their agents in Liverpool; the others charter with two or three lines. In the former case half a penny (1 cent) per pound would be paid, and in the latter either a lump sum or up to three-fourths of a penny (1½ cents) per pound. The United Kingdom has the giant's share of the carrying as well as of the meat trade, but one French company—the Chargeurs Réunis—takes large quantities, principally mutton, both to London and Havre, for account of No. 2, whose frozen meat reaches even as far as the Franco-German frontier.

STOWAGE.

This is of the highest importance, great care being required in piling the meat so that no crushing takes place. It requires considerable experience, especially in the case of mutton, practiced stevedores fitting one carcass into another in such a manner as to save one-third of the space in the chambers.

RECEPTION AT DESTINATION.

On arrival of shipment, if the wholesale market be slack, the meat is dispatched to the different towns in England, Scotland, Ireland, and even France, in which the companies have depots and shops, where it is retailed, thereby avoiding the possibility of loss.

BY-PRODUCTS.

The entrails are sold here, to be boiled down for tallow and grease for candles and lubricating purposes. The long gut is pickled in salt and exported to Germany, Italy, and the United States for sausage casings, for which there is a good demand. There is also an Italian firm which buys largely for conversion into strings for stringed instruments.

The shin bones are converted into knife handles, buttons, combs, etc. The kidneys and hearts are frozen and the tongues salted or frozen for export.

Hides are generally salted. Sheepskins are dried and baled for export.

Horns and horn piths are exported as broken stowage. Hoofs are boiled down for glue or grease.

PRODUCT.

The present rate of slaughter is set down at 2,300,000 animals per annum for freezing purposes.

The quantities and value of the exports from the inception of the industry up to the end of the third quarter of 1897, taken from official returns, were as follows:

Exports of frozen sheep carcasses.

Year.	Quantities.		Value (gold).
	Kilograms.	*Pounds.*	
1883	....	....	$11,412
1884 *	....	....	33,159
1885	2,862,270	6,310,794	75,323
1886	7,350,671	16,205,176	360,508
1887	12,038,889	26,540,756	963,112
1888	18,247,988	40,228,374	1,459,839
1889	16,532,545	36,449,799	1,322,604
1890	20,415,000	45,007,400	1,633,105
1891	23,278,084	51,317,585	1,862,247
1892	25,436,221	56,076,942	2,034,898
1893	25,041,000	55,205,200	2,003,254
1894	36,486,000	80,437,100	1,864,110
1895	41,882,000	92,333,600	1,675,273
1896	45,105,000	99,435,651	1,804,205
1897 (first nine months)	37,650,000	83,004,800	1,506,007
Total	312,325,668	688,553,177	18,609,056

* 33,159 carcasses.

Exports of frozen beef.

Year.	Quantities.		Value (gold).
	Kilograms.	*Pounds.*	
1885 (84 carcasses)	....	....	$1,680
1886 (527 carcasses)	....	....	12,800
1887	....	....	....
1888	41,581	91,686	3,326
1889	734,264	1,619,052	58,742
1890	662,860	1,395,346	53,029
1891	73,769	162,660	5,902
1892	283,687	625,490	22,695
1893	2,778,485	6,186,860	222,279
1894	26,700	58,873	12,400
1895	158,700	349,934	63,482
1896	299,700	666,838	119,863
1897 (first nine months)	299,100	659,516	119,660
Total	5,358,846	11,816,255	695,858

From the foregoing tables, it will be seen that, while the export of mutton has continued steadily on the increase, the export of beef has been very variable, attaining large proportions only in the years 1889, 1890, and 1893.

THE COMPANIES.

No. 1.—The enterprise is the same as the San Nicolas, both being run on English capital. Hence the difficulty of getting figures. It is acknowledged that the pioneer company has lost heavily from time to time on its working capital through various causes, and report does not say what profits have been earned in the fifteen years of its existence, or if there are any; but the concern is a strong one, and, I am informed, is now beginning to pay.

No. 2.—As stated before, this was originally a private firm, and as such was making very large profits on its original capital, nearly all being employed for the enlargement of buildings and machinery. The result is that it is now a colossal concern, and the largest exporter of frozen mutton in the country. The unfortunate failure in 1890 of the senior partner in sundry outside speculations caused the others to convert the whole concern into a public company, the creditors of said partners entering as shareholders. The yearly balance sheet published for 1896 showed the declaration of a dividend of 5 per cent, besides a good balance added to the reserve fund; and this in an exceptionally unfavorable year.

No. 3.—The San Nicolas factory changed owners over a year ago. The former proprietor got into serious financial difficulties, and the business was purchased by a Buenos Ayres firm with financial and influential relations in Great Britain. The business has been almost exclusively in mutton export, and has been conducted on a large scale. What it paid in former years is kept private, but no doubt profits were at times realized.

No. 4.—The "Estacion Lima" company is formed with English capital. These companies are reluctant to give information as to their profits or losses; but I have ascertained accurately that in 1895 this concern paid 13 per cent, but nothing last year, owing to the fluctuation of the currency, which entailed a loss of some $50,000 gold. Thirteen per cent is probably the highest figure yet earned by the industry. An experienced authority in the freezing business states, however, that any of the establishments which earned 5 per cent last year could be considered fortunate and prosperous.

A new company is spoken of as in course of formation, to work on the south side of the Riachuelo, in the Province of Buenos Ayres, and nearer to the mouth of that creek than the one referred to as No. 2, which would naturally suffer considerably by the competition. The starting of a new enterprise in this line would point to an anticipated improvement in business generally.

The following tables show the comparative importance of each concern at the present time:

Number.	Locality.	Date of establishment.	Capital.			Machines.		
			Ground and buildings.	Machinery.	Total.	No.	Horse-power.	Staff.
1	Campaña	1882	1,500,000	104,280	1,604,280	7	576	346
2	Riachuelo	1884	1,450,100	425,000	1,875,100	35	582	391
3	San Nicolas	1886	540,000	420,000	1,260,000	10	273	110
4	Zarate	1886	1,075,000	120,000	1,195,000	8	221	378
Total			4,565,100	1,369,280	5,934,380	60	1,652	1,225

Exports of each establishment during the year 1895.

Number.	Sheep.	Steers.	Sundry other meats.	Tallow and grease.	Total value in gold.
	Kilograms.	*Kilograms.*	*Kilograms.*	*Kilograms.*	
1	11,056,000	176,504	146,505	1,020,000	$550,600
2	14,960,000	1,001,000	33,973	1,600,000	789,800
3	2,403,000	....	24,970	316,917	125,600
4	13,463,000	410,038	197,531	1,252,000	679,200
Total	41,882,000	4,587,542	402,999	4,188,917	2,145,200

For the year 1896, statistics of only Nos. 1 and 2—that is to say, the River Plate Fresh Meat Company, Limited, and the Sansinena Frozen Meat Company—have been obtainable. They are as follows, being interesting on account of the huge increase in the operations of both, but especially of No. 2:

Number.	Capital employed (gold).	Workmen.	Wages (gold).	Produce prepared and disposed of.				
				Frozen meat.	Preserved meats.	Tallow and grease.	Other products.	Total value in gold.
				Kilos.	*Kilos.*	*Kilos.*	*Kilos.*	
1	$1,300,000	137	$65,000	11,000,000	250,000	1,125,000	2,012,000	$1,032,666
2	1,610,000	358	153,852	19,497,076	....	4,293,896	2,130,552	2,708,544
Total..	2,910,000	495	218,852	30,497,076	250,000	5,418,896	4,142,552	3,741,210

FOWL FREEZING.

There are other articles of consumption, such as ducks, partridges, turkeys, snipe, fish, etc., which are also sent to Europe, principally to France. They obtain a ready sale, but no reliable record of quantities can be arrived at. The firm of Sansinena, before the company was formed, sent in one cargo to Paris, during the last exhibition, some 40,000 birds of various classes. This firm started a freezing establishment in the exhibition itself, with an accompanying restaurant; so that, through the medium of plate-glass windows, patrons could choose their food for the following day. The result of this venture was that Messrs. Sansinena & Co. received the only gold medal for frozen victuals, and Don Francisco Sansinena himself, the present managing director of the company, was elected Chevalier de la Légion d'Honneur.

PRESENT CONDITION OF THE INDUSTRY.

Information as to the positive working results of the different companies can not be well obtained, as, with one exception, their reports and balance sheets are published in England. Of the four concerns, two are earning dividends; one, 5 per cent last year, the other 13 per cent in 1895, and in 1896 nothing, owing to gold fluctuations. One is reported as sometimes earning in a fair way, sometimes losing on the working capital, but now promising to pay. The remaining one, after suspending, is about to renew work with fresh and ample capital.

It is, however, fair to assume, on general grounds, that an industry started fifteen years back would not have continued, were it without the prospect of a paying future. Undoubtedly, keen competition with Australia and New Zealand, together with the fluctuating paper currency of this Republic and prejudices to be overcome in consuming markets, have had to be reckoned with, but that this country possesses, in the highest degree, the primary requirements of the trade is unquestioned. Above and beyond its already fairly developed resources, I may mention that during the last few months the auction marts have been overcrowded with the finest imported sires, both bovine and ovine, thus enabling local breeders to improve their stock at very little expense. The majority of fine-stock importers must have lost considerably, owing to the glut of prize-winning sires of both classes imported; but the result can not but redound to the credit of the import trade.

How to handle the freezing industry is now being worked out on the basis of past experience, and, from what can be gathered from commercial sources interested, there is every prospect of continued expansion, offering to the stock raiser a spot market for his increase, which, as far as sheep go, is unsurpassed throughout the whole world.

Considering the pastoral area of Argentina, the quality of grass, cheapness of land, capital flowing in, improvements in breeds, steady immigration, and outspread of railways, there is every reason to believe that this Republic is destined to attain preeminence as a meat purveyor to European markets.

LYMAN W. CHUTE,
Vice-Consul.

BUENOS AYRES, *December 16, 1897.*

AGRICULTURAL IMPLEMENTS AND MACHINERY IN AUSTRALIA.*

The following information concerning agricultural implements and machinery in Australia (colony of Victoria) was furnished by James Martin, esq., Sydney, in answer to a series of interrogatories addressed to him by Consul Bell, of Sydney, and transmitted to this Department on March 7, 1898:

Reapers and binders.—The United States makes in greatest favor in this colony are McCormack, W. A. Wood, Deering, Osborne, and Johnston. The Aultmann-Miller "Buckeye" binder was in this market until recently, but the late patterns are not known.

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* Information compiled at the request of the director of the Philadelphia Museums.

In English binders there is practically only the one competitor, Hornsby, who maintains the English reputation.

Mowers.—All the makers who do a reaper and binder trade in New South Wales do a mower trade also, but, in addition, there is the Emmerson Company, Rockford, Ill., whose "Standard" mower is a great favorite in this market.

Hayrakes.—The number of American hayrakes sold is small, as most of the hay is cut and bound with the binder. The Stoddard's "Tiger" and the Moline Plough Company's rake are both known here.

Hay tedders.—These are practically unknown in this market, as the harvest season is such that the hay does not require tedding, and sheaf-bound hay is always allowed to mature in the stocks.

Harrows.—The spike-tooth harrow of American manufacture is very popular, as is also the spring tooth, and the American types conform to the requirements of this colony.

Cultivators.—The Planet, Jr., has unquestionably the largest trade in this line. Their one and two horse cultivators exactly suit the requirements. The Syracuse is also well known.

Binding twine.—Sisal and manila twine are made locally and supply most of the demand. Scotch and Irish makes of manila twines are also in the market, but the freight charges tend to discourage importation. Some American binder twine reaches this market, and the Plymouth is represented. The finest grade genuine manila twine of Scotch and Irish manufacture can be laid down here at £34 ($165.46) per ton; the locally made manila twines range a little higher.

Terms of payment.—The usual terms demanded by American manufacturers are cash against bill of lading, and this is one of the conditions which hampers their trade in Australia. No English house stipulates for cash against documents, and some of the United States manufacturers, who have had experience in Australian trade for some time past, make terms with the Australian buyers; but the usual terms are cash against documents on New York.

The names of the manufacturers, other than American, shipping the foregoing classes of implements to Australia are as follows:

Reapers and binders: Hornsby.

Mowers: Hornsby, Harrison-McGregor, and Bamford.

Rakes: Ransome, Head & Jeffries, Howard, Blackstone, and Bamford.

Harrows: Howard, Larkworthy, Blackstone, and Hunt.

Cultivators: Clay.

These are all British manufacturers.

The machines imported annually are estimated as follows: Reapers and binders, 400; mowers, 150; harrows—spike tooth, 200 sets; spring tooth, 25 sets; cultivators—one-horse, 1,000; two-horse, 200.

The American manufacturers of the foregoing goods represented in this colony are McCormack, Walter A. Wood, Deering, Johnston, Osborne, Stoddard, Moline, Barlin Orendorff, and the S. S. Allen & Co.; in fact, the United States manufacturers have studied to have special representation in all important lines.

HATS AND BOOTS AND SHOES IN AUSTRALIA.*

The change in the style of men's hats since my coming to Australia, in the fall of 1893, has been surprising indeed. In most things, even in fashions, the British people move slowly; but in the case of hats their conservative customs have been forgotten.

Four years ago, a soft hat with a crushed top was so rare that if it were a neat one on a well-dressed man it was prima facie evidence of the nationality of the wearer, as Americans were supposed to stand alone in such a choice of head gear; while now, though the silk hat, which is much cheaper here than in the United States, is used by the wealthy, the soft hat, made on the American pattern, is worn by a majority of men on the street, and the head man in the hat department of one of the largest concerns in Australia tells me that for the last few months it has been difficult to get soft hats fast enough for the trade.

We should have a goodly portion of this soft-hat trade, as it is freely confessed here that American hats are superior and of better style than those of any other country. However, it must be remembered that price is of more importance here with all classes of buyers and in all classes of goods than in the United States; still it seems to me that our people are now ready to compete with a middle or fair grade of hats.

Four years ago our boot and shoe trade in Sydney was very small. I visited many dealers in person and made inquiries as to styles, prices, classes of goods, and whence imported. The usual answer to inquiries regarding American goods was that "they do not fit our people, our tastes are not consulted, our necessities are not suited, and prices are too high."

I urged dealers to make trial orders, I reported conditions through the Department to our manufacturers, and the change has been most gratifying. Among ladies, at least, the American boot is the thing; and, instead of their not being wanted by customers, they are so popular that many foreign makes are sold for American boots. Still I am satisfied that, could we get down to actual facts, we have fully 30 per cent of the import trade, with a constantly increasing popularity among well-to-do people.

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* Information compiled at the request of the director of the Philadelphia Museums.

What has been done in the boot trade can be done in the hat trade, and I want to see our people take advantage of this opportunity.

It must be remembered, however, that the demand for high-priced hats—say from $4 to $5—is rather limited; but if our people can send a light, stylish soft hat for from 8s. to 12s. ($1.95 to $2.92), there can be a fine trade worked up, for the soft hat has come to stay. This is a warm climate. The silk hat is losing its popularity, the stiff felt hat is too warm, while changes of the weather are too sudden for straw hats; so the light, soft fur or felt hat is to be the head wear of the future.

Another observation is necessary. Here merchants mostly stamp their own hats. They are willing to buy them in the United States and sell them for American, but they must have their own stamp on them. This is natural, and good business policy. It is a "standing ad.," and it indicates a connection between the Sydney dealer and the American manufacturers. But recently an American agent here sent a good order, and the home company made the mistake of having the hats all stamped with the exporter's name—not the manufacturer's name, which would probably have been equally fatal—with the further gentle reminder that they were made in Sydney. The buyers, an excellent firm, declined to accept the goods, as their own stamp was expected to adorn each article.

In this suggestion to American dealers, I do not mean to intimate that exporters should endeavor to deal direct with Sidney merchants, for my observation is that our business here can be most successfully done through experienced men on the ground, who personally know the standing of the houses and the methods of the country.

GEORGE W. BELL,
Consul.

SYDNEY, *March 7, 1898.*

BICYCLES IN JAPAN.

I have received a communication from a firm of cycle manufacturers requesting information regarding the trade in Japan. After some investigation, I am able to report that the use of bicycles in Japan is largely restricted to resident foreigners, owing to their cost, although they are being slowly adopted by Japanese. From a cyclist's point of view, the roads are fairly good, except in and after wet weather, when in many localities they are almost impassable.

Two or three small shops in Japan turn out an inferior imitation of foreign wheels, but the principal supply is obtained from the United States and England.

There is now laid upon wheels an ad valorem duty of 5 per cent. This will probably be increased when the new treaties come into effect next year. There is no differential duty favoring manufacturers in other countries.

The retail prices, I believe, are much the same as in the United States. I am unable, however, to give an exact opinion. There is a demand for a cheaper wheel, and a considerable reduction in price would enable the Japanese to purchase them. In my opinion, the reason for their slow adoption is in the fact that the prices asked are almost prohibitive to the middle class.

The merchants engaged in the business here are among the leading commission houses. Many of the principal American and English manufacturers have agents and personal representatives here, and this seems to me to be the most effective manner. The following is a list of the bicycle agencies in Yokohama:

H. MacArthur & Co. (English)—Rambler and Joseph Lucas & Sons.

G. W. Rogers (English)—Humber and Crescent.

Capt. L. B. Walls (American).

Bagnall & Hilles (American)—Dayton and Ide.

E. H. Tuska (American)—Columbia, Hartford, and Vedette.

Andrews & George (American)—H. A. Lozier & Co.'s wheels and the Cleveland.

T. C. Fisher (English)—Ariel and Swift.

Other firms (American) dealing in machinery are the American Trading Company, Middleton & Smith, F. W. Horne, China and Japan Trading Company, and Frazar & Co.

Local merchants, as a rule, do not buy, but usually sell on commission.

Catalogues, circulars, etc., may be printed in the English language. Of course, a Japanese translation would greatly help.

JOHN F. GOWEY,

YOKOHAMA, *March 15, 1898.* *Consul-General.*

THE MARKETS OF THE FAR EAST.*

Prompted by a desire to further the development of what I term our "trans-Pacific opportunity," I recently addressed letters of inquiry to certain leading importers and exporters (with whom I am acquainted and whose answers are trustworthy), located in the following principal commercial entrepôts of eastern Asia: Vladivostock, Yokohama, Kobé, Chemulpo, Niuchwang, Tientsin, Chefoo, Shanghai, Hankow, Fuchau, Amoy, Canton, Hongkong, Saigon, Bangkok, Singapore, Manila, and Batavia—an array of trade centers that could rival many ports of the United States and Europe in actual bulk and value of trade. The answers are gratifying and attest my assertion that never in the history of the Far East has there been so much commercial activity as at the present time.

On every side business operations are being extended. The cities are growing with wonderful rapidity, and, with few exceptions, the exports and imports of each year show marked increase. European governments, firms, and steamship lines are watching every port of the coast from Vladivostock to Singapore as never before. In contrast to this, we find American houses and steamship lines making but little effort to get a foothold.

The questions above referred to covered general trade conditions, and a summary of the answers is given below:

Conditions of trade exchange with the United States are less satisfactory than those with England, Germany, and France. The fault is largely with American business and shipping interests. Natural conditions are as favorable to trade with the United States as with Europe. In 1895, 1896, and the first half of 1897, freight rates and prices were largely in favor of Europe, but, owing to the increased demand both for goods and shipping space, the rates have advanced, until American goods shipped in American bottoms or direct lines from America can compete now and during 1898 better than for many years.

Japanese and Chinese cheap labor may ultimately prove a great competitive force, but at present it has not reached that degree of strength which should deter American exporters from extensive operations. There is no better field, not even in South America, for extension of American trade than the Far East. Its present importance is evidently not appreciated in the United States. With proper effort, our country could have four times its present bulk of trade; but the effort should be made at once. The year 1898 promises to be important.

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*See CONSULAR REPORTS, No. 212 (May, 1898), p. 55.

The chief mistake is the failure to send competent representatives of business houses to the Far East. What is wanted is men of tact, experience, education, and gentlemanly bearing, masters of the business they represent, so that buyers can obtain from them every variety of data covering prices, quality, details of manufacture, freight charges, time of shipment, etc. Where one American traveler visited Asiatic ports in 1897, ten came from Europe, and the orders given were in corresponding proportion. Every buyer in the Far East welcomes a capable American trade agent, and will at least hear what he has to say. There is a remarkable unanimity in the opinion that the extension of commerce with the United States is greatly hampered by this lack of competent and responsible representatives.

Other suggestions for the advancement of American trade are numerous and interesting. They include: (1) Studying the local markets and catering to their special wants; (2) giving terms of payment or credit as liberal as those of European exporters; (3) framing prices with full consideration for the silver currency of the Far East, which makes the price to the purchaser practically double that of the seller; (4) packing goods with great care and special regard for dampness, heat, etc.; (5) shipping by the quickest and most direct routes, because of the long time necessarily consumed between order and receipt of goods; (6) advertising in the local papers, as is done in the United States; (7) issuing circulars and price lists, accompanied, whenever possible, with illustrations, in the native language or dialect; (8) selecting as agents only firms or men of recognized standing or influence, for the natives often judge goods by the man who sells them; (9) quoting the lowest prices possible for the best quality when introducing goods or sending trial orders; (10) remembering that the large houses in the Far East are naturally conservative, and that hence the methods used at home may not avail in placing orders here, although persistence on the part of tactful agents will eventually bring large rewards; (11) finally, exploiting the entire field from Siberia to Siam with the same energy that is displayed in the United States, but with ways and means suited to Asiatic characteristics and conditions.

More elaborate suggestions include the extension of the merchant marine, the early construction of the Nicaraguan Canal, the organization of an American chamber of commerce of the Far East with headquarters at Shanghai, and the establishment of an Asiatic commercial museum* at San Francisco.

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* See CONSULAR REPORTS No. 205 (October 18, 1897). p. 279.

Lest I be accused of failing to give a certain number of American exporters and manufacturers credit for their exertions in the Far East, I wish to say that there are some who are bending their energies to the development of trade with China, Japan, etc., and are meeting with extraordinary success, which goes to prove my claim that the market is here and only awaits a proper campaign for its conquest. The most notable successes have been made in flour, lumber, kerosene oil, lubricating oil, railroad equipments, cotton goods, raw cotton, leather, nails, machinery, electrical supplies, canned goods, wine and beer, sewing and typewriting machines, bicycles, lamps, clocks and watches, and novelties; but in every instance large trade has been built up by competent representatives who have studied the field. I know of no American firm handling goods that are consumed in any quantity in eastern Asia which failed to do a fair business after sending the right kind of men to build up its trade.

I can not too earnestly urge upon our American exporters and manufacturers the necessity of working to develop this trans-Pacific market, with its population of 300,000,000, its foreign trade in 1897 of over $600,000,000, its coast line of 5,000 miles, its numerous harbors and cities, its vast river systems, its many steamship lines, its organized systems of trade, and its opportunities for development. The population and commerce of Japan alone exceed those of South America. I believe in exploiting South America to the fullest extent, but not to the exclusion of this promising market.

JOHN BARRETT,
BANGKOK, *January 25, 1898.* *Consul-General.*

KOREAN LAND TAXES.

Consul-General Allen sends from Seoul, February 8, 1898, an extract from the Seoul Independent relative to the tax on land in Korea, upon which question, he says, many inquiries have been received.

[Extracts from the Independent, February 8, 1898.]

The main source of revenue of the Korean Government is derived from the land tax. Out of a total income of $4,527,476,* $2,227,758 comes from this source. The words "land tax" possess a different meaning in Korea than in other lands. The Government does not collect a cent of tax from house lots or timber and pasture lands, but from rice fields and lands cultivated for grain. The former pay a much higher rate than the latter. The methods by which the rates are determined are as follows: Rice lands are first classed according to their yields; for instance, the best paddy fields are taxed 6 cents for an area which requires one mal of seed (about a bushel) per annum, therefore a field requiring 100 mal of seed rice returns $6 per annum, and a field returning $6 revenue is called one kel. There are thirteen different kels. As we said above, best rice fields pay $6 per annum for each kel. Second-grade fields pay $5 per kel, and so on down to 40 cents per kel. Such land as comes under the third class is not rice land, but is used for other grains, and is called by the Koreans "dry fields." Until three years ago the method was not definitely put into practice, and there was much irregularity in levying the required sums. The former Minister of Finance had a law passed requiring the rice fields in the level districts to pay $6 per annum for each kel (*i. e.*, a field which requires 120 bushels of seed); the next grade of land is required to pay $5 per annum.

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* Mexican currency.

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The present system of collecting is somewhat better than that of antebellum days; but it is by no means satisfactory. The Department still goes by the rough survey which was made centuries ago, so that hundreds of poor people pay taxes on land which has been washed away, and many influential yangbans pay scarcely anything for the use of their rich lands. We hope the time will soon come when a thorough survey of the cultivated fields of the Empire will be made, thereby adjusting the irregularities of the present system of taxation.

COMMERCE AND INDUSTRIES OF BRITISH COLUMBIA.

TARIFF ON LUMBER.

At the suggestion of the premier of the Province, the legislative assembly on the 18th instant almost unanimously passed a preamble, setting forth that the new United States tariff had deprived the Province of a large part of the business formerly done in shingles and lumber, and requesting the Dominion Government to impose an increased duty on lumber and shingles imported into Canada, making it equal to the United States tariff. The discussion showed that during the last six months the lumber mills in the Province had suffered greatly, and were compelled in many instances to run only half time.

DISTRESSED KLONDIKERS.

Up to the 23d instant, 4,560 Klondike miners' licenses to prospectors (mostly from the United States) had been issued at the custom-house in Victoria, at $10 each. The cash receipts for the same were $45,600, and the cost being less than 3 per cent, the remainder of this sum was turned over direct to the Dominion Government. Just now there is a lull in the emigration to the north, caused perhaps by the fact that the roads and passes are in an almost impassable state. In view of this fact and the daily reports of disasters, it is deemed inevitable that a large number of the prospectors who go north will return sick, indigent, and penniless. The provincial legislative assembly last week, at the suggestion of the secretary of the Province, unanimously passed a resolution requesting the Dominion

Government "to take effective steps at the ports of embarkation and debarkation to prevent sick and indigent persons, criminals, and lunatics, who are not British subjects, from emigrating to British Columbia," and to take care of similar persons who are subjects of the Queen.

THE SALMON PACK.

The salmon pack of the canneries of this Province during 1897 was greater than ever before, reaching 1,015,477 cases, of a gross value of $3,023,514, most of which was shipped direct to England, around Cape Horn, in sailing vessels. The year was an exceptional one, and it is not expected that the yield will be as large in 1898. In 1893, the total pack in the whole Province was 607,706 cases; in 1895, 600,889 cases; and in 1896, 616,482 cases. The shipments made during the season were: To England—by sea, 733,704 cases; overland, 43,330 cases; to eastern Canada, 130,815 cases; to Australia, 28,597 cases; and to other destinations, 226 cases.

PRODUCE OF MINES.

The annual report of the minister of mines of British Columbia has been laid before the legislative assembly, and contains many facts of interest as showing the development of the Province. Up to 1898, British Columbia has produced in minerals no less than $112,413,485, gold and coal being the two principal features, as the table shows:

Production of minerals during the years 1896 and 1897.

Minerals.	1896.	1897.	Total production.
Gold:			
Placer	$544,026	$513,520	$59,317,473
Lode	1,244,180	2,122,820	4,300,689
Silver	2,100,689	3,272,836	7,301,060
Lead	721,384	1,390,517	2,971,618
Copper	190,926	266,258	521,060
Coal	2,691,741	2,737,713	36,626,585
Building stones, etc.			1,350,000
All other	15,000	151,600	25,000
Total	7,507,946	10,455,268	112,413,485

The following table shows the annual output of the provincial mines from 1890 to 1897:

Year.	Amount.	Year.	Amount.
1890	$2,608,803	1894	$4,225,717
1891	3,521,102	1895	5,643,042
1892	2,978,530	1896	7,507,956
1893	3,588,413	1897	10,455,268

There were 558,322 tons of coal and 2,573 tons of coke exported and sold in California during the year 1897.

RAILWAY CHARTERS.

Two charters have already been granted for new railways in this Province, each to be on the mainland. One is the Arrowhead and Kootney Company, and the other the North Star and Arrow Lake Company. Each is required to deposit $5,000 with the provincial government within six months as a guaranty that it will spend $10,000 on surveys, etc., by June 30, 1899, or forfeit said $5,000 and also the charter.

FARMERS' INSTITUTES.

The provincial department of agriculture last year, for the first time, attempted to establish a series of farmers' institutes throughout the Province. The first annual report of the same has just been published, and shows that they have been only moderately successful. A distinguished student of the Ontario Agricultural College was secured to deliver lectures at the institutes. It appears that twelve institutes were organized with a total membership of 528, mostly resident on the mainland. An experimental farm has also been operated by the government, a few miles east of Vancouver. A project is discussed for the government to loan to farmers amounts not exceeding the estimated value of their lands, at 1 per cent, to be expended in cultivating land; said amount loaned to be payable in installments within forty years from the time same is advanced. But, thus far, the government has not adopted this plan, and it will probably be one of the issues of the summer political campaign, when members of the legislative assembly are all to be chosen.

FINANCES.

The official statement of the finances of the Province shows the debt to be $6,586,989.43; the balance of indebtedness over assets, $4,284,014.78. The fiscal year closes June 30. The receipts from all sources last year were $1,483,048, against $1,156,078 for the previous year. The expenditure for 1896–97 was $1,569,071, leaving a deficit of $86,023.

A statement made to the legislative assembly last month shows that the expenses for the seven months from July 1, 1897, to February 1, 1898, were $1,078,261.32. This large portion of the expenditure for the entire year is the result of the practice here of using the appropriations, on all the branches of public works, during the first six months of the fiscal year.

The premier has presented to the legislative assembly the estimates of the revenues and receipts of the Province for the ensuing year. The total receipts are put at $1,453,389.45, the principal sources being as follows: Dominion Government, $317,689.45; timber and mining licenses, $385,000; taxes on real and personal property, wild land, minerals, and income revenue, $434,000. The estimated expenditures are $1,992,609.71. So the provincial government starts for the new year with an expected deficit of $539,220.36. The sum of $35,000 is set apart for additions to new schoolhouses, $15,000 for surveys throughout the Province, and $483,700 for roads, wharves, and bridges. The last item includes new bridges at the gorge in Victoria, at Nanaimo River, over Thompson River at Kamloops; extensive repairs to bridges over the north arm of Fraser River; construction of new wharves at Esquimalt, North Saanieh, and Galiano Island; repairs to wharves at Mague Island, Sooke, Alberni, Harrison Lake, Nelson, and Mission City.

RAILROADS.

The present government of the Province has put itself on record as desiring the Dominion to secure a railroad from Teslin Lake to Port Simpson, or some other place on the coast of British Columbia, but without any grant from the Province.

On the 23d instant, to the great satisfaction of the Canadian Pacific Railroad, a resolution was passed in the provincial legislative assembly urging the Government of the Dominion to oppose the granting of a charter to the proposed Kettle River Valley Railway Company, on the ground that such railway, when constructed, will have its terminal in Northport, in the United States, and thus draw the ores and traffic from British Columbia to the United States. This is the Spokane Falls and Northern Railway Company, known as the Corbin Road, which asked for a charter for the construction of an extension of their line from near Northport, in the United States, to Cascade City, just inside the international boundary on the Canadian side; thence to Grand Forks, following the valley of the Kettle River on to Greenwood City and into the Boundary Creek district.

PROVINCIAL POLICE.

The annual report of the provincial police of British Columbia shows that the force consists of the superintendent, with headquarters at Victoria, one sergeant, and ninety-eight constables, besides special police, who are employed as required. The total cost of salaries is $80,000. During last year, 1,888 convictions were secured, 39 more than the previous year. Owing to the increase of crime among juvenile offenders, especially in the coast cities, a juvenile reformatory has been opened at Victoria, which now has 12 occupants. In various city lockups, which are maintained by the respective municipal governments, there were confined during the year, in addition to the above, the following prisoners sentenced to short terms for drunkenness or nonpayment of fines: Victoria, 365; Vancouver, 704; New Westminster, 122; Nanaimo, 42; Wellington, 17—making the total number of persons arrested and imprisoned during the year in the Province 3,138.

WOMAN SUFFRAGE.

In municipal affairs, the right of suffrage is determined by property and business, and not by sex; but in the election of members of the provincial and Dominion parliaments, universal manhood suffrage is the law, except for Indians and Chinese. On Tuesday, the 23d instant, a monster petition for an extension of suffrage, on provincial matters, to women was presented to the legislative assembly. The petition was signed by 2,500 British subjects, residents of British Columbia, and was 60 feet long. There was no demonstration on its presentation. The experiment of woman suffrage as it works in the cities is not regarded as a success, although the petition therefor, which is presented annually, is larger this year than ever before.

DOMINION MINT.

The legislative assembly has unanimously passed a resolution requesting the Dominion Government to erect a mint in British Columbia.

ABRAHAM E. SMITH,
Consul.

VICTORIA, B. C., *March 26, 1898.*

LEAD MINING IN CANADA.

I inclose a copy of a circular issued to all the lead miners and mining men in Canada; also, a copy of a petition to Parliament, which was the outcome of this circular. It is understood that the petition is to be signed unanimously and presented to Parliament.

CHARLES E. TURNER,
Consul-General.

OTTAWA, *March 21 1898.*

A SOLUTION TO THE SMELTING PROBLEM.

[Extracts from circular to lead miners.]

The lead mining and smelting industry of Canada, which at this time is centralized in British Columbia, is battling against tremendous odds by reason of being forced into the United States market with its product—ore and bullion—a market hostile because of its high protective tariff. This tariff, which is designed by the United States to foster and build up the mining and smelting industry of that country, is, to the Canadian miner who ships his ore direct, burdensome in the extreme, as he must perforce seek that market; and it is absolutely prohibitive when applied to the bullion product of such ores smelted in Canada. There is a discrimination in the duty between lead in ore and lead in bullion, the object being to force the smelting of foreign ores in that country. It is absolutely impossible, because of this tariff discrimination between lead in ore and lead in bullion, to carry on at a profit the industry of mining and smelting Canada's lower grade ores, or the smelting of ores of any grade, inasmuch as under present conditions our lead must go to United States markets. It is a fact that the lead miners of the United States are, under a protective tariff on lead, successfully and profitably operating mines that range in grade from 15 to 30 per cent lower than those which under present conditions we can not think of operating in British Columbia. Kootenai has the highest grade lead mines in the world; yet the lead product of her ores, because of being forced into a hostile market, fall short of paying the freight, treatment, and duty charges. And, were it not for the association with the lead, they could not be worked at all. The reason we are forced into that market lies in the utter absence of an available home market. It is not available, because of a low Canadian import duty on lead and lead products which admits foreign lead and foreign lead manufactures comparatively free. The United States tariff on lead in bullion, pig, and the principal lead products averages four times more than that of Canada. Canada draws her lead supply principally from the United States and Mexico, and she will never consume the product of her own lead mines until she has placed her lead miners and her lead smelters on an equal footing with those of the United States; until she has, by a similar tariff act, shut out the cheap leads of Mexico and placed herself beyond the control and influence of the United States lead trust. The lead miners of the United States are enjoying great prosperity to-day because they are protected by their tariff. Canada, then, need only take the United States as an example.

Some three years ago the Dominion Government sought to foster the smelting industry by offering a bonus of $150,000, to be paid at the rate of $30,000 per year, with a maximum of 50 cents per ton on all ores smelted in Canada. This was wholly ineffective. * * * An export duty as a means of forcing the smelting of lead ores in Canada is not to be thought of, as it would completely prostrate lead mining without opening the Canadian market to Canadian lead. * * * The problem of lead smelting in Canada can only be solved through a prohibitive tariff on lead in pig or bars, white lead (dry or mixed), bullion, lead manufactures, and all articles in the composition of which lead figures to any considerable extent.

Canada will never be in a position to manufacture lead until she has the lead smelters. She will never have a lead smelter until she has shut out foreign leads and made the home market available to the home smelter.

The question naturally follows, Can Canada consume the product of her lead mines? The official statistics given out by the Department of Trade and Commerce show the consumption of the lead in bar, sheet, white lead, and lead manufactures to be about 25,000 tons per annum. The lead output of Canada for the year 1897 was approximately 18,000 tons—7,000 tons short of the consumption. It is true that the establishment of factories to supply the demand for lead products would require time; but there is already a Canadian market for 8,000 tons of pig lead, none of which is now supplied by Canadian mines, and the comparatively easy establishment of corroding works would make a market for 6,000 tons more for the manufacture of lead paints. In case of immediate or future surplus, we would be at no greater disadvantage, so far as the United States market is concerned, than we are at the present time. Eighty per cent of the output could be almost immediately utilized in Canada.

The effect of such a measure would be, of course, to greatly stimulate lead mining in Canada, as it would make it possible to work at a profit mines so low in grade as to be now worthless, and so greatly increase the output. But great smelting and manufacturing concerns would then have been established, and they, being in a better position than the individual miner with his ores, or a lone and unprotected smelter with its bullion, could seek the Orient or Europe as a market for this surplus.

I believe that Canada is now in a position to cut away from the United States in the matter and take up a course looking towards supplying her own lead markets from her own lead mines.

If Canada is ever to have commercial independence—a hope that burns ever in the breast of loyal Canadians—there can never be a more opportune time than the present to begin the working out of that end. Notwithstanding the friendly overtures of the present Canadian Government, and in the face of our low and friendly tariff, the United States is treating us, to say the least, ruthlessly in many particulars, most notably in the matter of an import duty on lead. A retaliatory measure that would show to that country our independence, and at the same time greatly stimulate and foster our mining, smelting, and manufacturing interests, appears to me to be eminently the right thing.

The object of this circular letter is to start an agitation that must end in action of some kind on the part of the General Government, since the question is one of vital importance to the lead miners of Canada, and will no doubt be taken up by them and pushed. I respectfully request that you give this matter your immediate consideration, and, further, if you are favorably impressed with the idea and plan, that you convey to paper such approval, together with your own ideas and suggestions on the subject, and mail the same to my address for use in the campaign which is about to be opened in the interest of the lead mining and smelting industry of Canada.

Very respectfully,

DAVID W. KING,
Editor Kootenaian.

KASLO, B. C., *February 28, 1898.*

PETITION TO THE GOVERNMENT AND PARLIAMENT OF THE DOMINION OF CANADA BY THE FEDERATED CANADIAN MINING INSTITUTE.

Whereas the following resolution was carried in full session at the annual meeting of the Federated Canadian Mining Institute, held at Montreal, Quebec, March 2, 3, and 4, 1898:

Resolved, That a committee be appointed to draft and present to the Dominion Parliament and other proper channels a petition, setting forth as it being the sense of this institute (representing, as it does, the mining and kindred industries of Canada) the desirability that an efficient import duty should be placed on lead and lead manufactures by the Canadian Government.

Therefore, the said Canadian Mining Institute hereby petitions the Dominion Government, Parliament, and all others interested in the industrial advancement of Canada to use every honorable means and energy to at once place an import tariff on lead and lead manufactures equal to that tariff levied on similar products by the United States. Believing, as we do, that such action would be the means of fostering the mining and smelting and refining and manufacturing industries in Canada, we ask that such far-reaching industries be earnestly supported by all means and every party, irrespective of politics, for the general weal.

MINERAL PRODUCTION OF CANADA, 1897.

I transmit statistics showing the mineral production for the year 1897, as given by the geological survey of Canada.

Summary of the mineral production of Canada in 1897.

Product.	Quantity.*	Value.*
Metallic.		
Copper (fine, in ore, etc.)† ... pounds	13,300,802	$1,501,660
Gold		6,190,000
Iron ore ... tons	71,451	178,716
Lead (fine, in ore, etc.)‡ ... pounds	39,018,219	1,396,853
Mercury ... do	688	324
Nickel (fine, in ore, etc.)§ ... do	3,997,647	1,399,176
Platinum		6,600
Silver (fine, in ore, etc.)‖ ... ounces	5,558,446	3,322,905
Total metallic		13,996,234
Nonmetallic.		
Asbestos and asbestic ... tons	25,262	324,700
Chromite ... do	2,637	32,474
Coal ... do	3,876,201	7,286,257
Coke¶ ... do	78,811	209,920
Felspar ... do	1,275	3,506
Fire clay ... do	1,923	5,759
Grindstones** ... do		40,000
Gypsum ... do	239,691	244,531
Limestone for flux** ... do		40,000
Mica**		75,000
Mineral pigments:		
Baryta ... tons	571	3,060
Ochres ... do	3,905	23,560
Mineral water** ... gallons		140,000
Molding sand ... tons	5,485	10,931
Natural gas††		325,873
Petroleum‡‡ ... barrels	709,857	1,011,546
Phosphate (apatite) ... tons	908	3,984
Pyrites ... do	38,910	116,730
Salt** ... do		190,000
Sundry minerals, partly estimated (including actinolite, graphite, manganese, soapstone, and tripolite)		10,000
Structural materials and clay products.		
Cement:		
Natural ... barrels	85,450	65,893
Portland ... do	119,763	209,380
Flagstones		7,190
Granite**		75,000
Pottery**		125,000

* Quantity or value of product marketed. The ton used is that of 2,000 pounds.

† Copper contents of ore, matte, etc., at 11.29 cents per pound.

‡ Lead contents of ores, etc., at 3.58 cents per pound.

§ Nickel contents of ore, matte, etc., at 35 cents per pound.

‖ Silver contents of ore at 59.79 cents per ounce.

¶ Oven coke, all the production of Nova Scotia and British Columbia.

** Partly estimated.

†† Gross return from sale of gas.

‡‡ Calculated from inspection returns at 100 gallons crude to 42 refined oil and computed at $1.42½ per barrel of 35 imperial gallons. The barrel of refined oil is assumed to contain 42 imperial gallons.

Summary of the mineral production of Canada in 1897—Continued.

Product.	Quantity.	Value.
Structural materials and clay products—Continued.		
Sewer pipe		$164,250
Slate		42,800
Terra cotta		155,595
Building material (including bricks, building stone, lime, sands and gravels, and tiles), estimated as for previous year		3,600,000
Total structural materials and clay products		4,445,108
All other nonmetallic		10,097,831
Total nonmetallic		14,542,939
Total metallic		13,996,234
Estimated value of mineral products not returned		250,000
Total in 1897		28,789,173
1896		22,609,825
1895		20,715,319
1894		19,933,857
1893		20,035,082
1892		16,628,417
1891		18,976,616
1890		16,763,353
1889		14,013,913
1888		12,479,550
1887		11,365,705
1886		10,221,255

REMARKS.

The figures given in the preceding general table bring out in a marked degree the gratifying results of the greatly increased activity in the mining industry during 1897.

The following table shows the principal changes in production and values for the calendar year 1897, as compared with the figures given in the revised summary for 1896:

Product.	Quantity.		Value.	
	Increase.	Decrease.	Increase.	Decrease.
Metallic.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
Copper	41.6		46.9	
Gold			122.6	
Iron ore		22.3		6.7
Lead	61.2		93.7	
Nickel	17.7		17.7	
Silver	73.4		54.6	
Nonmetallic.				
Asbestos and asbestic	106.2			24.5
Coal	3.5		0.8	
Gypsum	15.8		37.3	
Natural gas			17.9	
Petroleum		2.3		12.5
Cement	37.6		36.5	

The increase in the items silver and lead is practically all to be credited to British Columbia, to which Province is also largely due the increase in the production of copper. The largest increase in this latter metal is, however, due to the increased shipments of nickel-copper mattes from the Sudbury mines in Ontario. The third copper-producing Province—Quebec—also contributed a fair amount to the increase shown. The silver, copper, and lead increases, as far as British Columbia is concerned, represent the largely extended activities in the South Kootenai districts of Slocan, Nelson, and Trail Creek.

The most significant item, however, is to be found in the increase of nearly 123 per cent in the gold. All the gold-producing districts of the Dominion show gratifying increases, although by far the largest part is due to the discoveries of rich placer mines in the Yukon country, and to the increased output of Trail Creek and other districts in British Columbia. The former increase amounted to about $2,250,000 and the latter to nearly $1,000,000.

The remaining metal of importance is nickel, which is seen to have shown an increase of nearly 18 per cent. As in the past, this is all from the Sudbury district.

Thus, the aggregate result of the increase in the metallic products is nearly $6,000,000, or a proportion of about 74 per cent.

An interesting result of the mining developments and discovery of 1897 is shown in the increase in the proportion of the value of the total mineral production to be credited to the metals. In 1896 this proportion constituted about 36 per cent, while in 1897 it was increased to nearly 49 per cent.

Turning to the nonmetallic products, we find that as far as the data at present available permit of a conclusion being arrived at, the total value shows under 2 per cent of an increase over that of the previous year. The only considerable change to be noted is that given under the heading asbestos, where the quantity has more than doubled, while the value has fallen off almost 25 per cent. This is due to the fact that the output of the new by-product asbestic is included. This constitutes over half the weight of the whole, but, being a low-priced article, brings down the price per unit very much. The returns, however, show also a falling off in the prices of the usual grades of the mineral, apart from the above influence.

In coal the variation is but little. The falling off in the production of the higher priced coal of British Columbia and the increase in that of Nova Scotia at a lower price caused a fall in the total value. In gypsum the increase in the value is larger than that shown in the quantity. This is due to the larger proportion of the higher priced product—plaster of paris—included in the returns for 1897. The lower average price for petroleum ruling during that year caused the decrease in the value of this article to be much greater than that in the quantity.

The following table gives the proportional values of the different minerals in the grand total. It is interesting to note the changes in their relative position in 1897 as compared with 1896.

Product.	Percentage of total production.	
	1896.	1897.
	Per cent.	*Per cent.*
Coal	31.94	25.31
Building material	15.72	12.5
Gold	12.3	21.5
Silver	9.5	11.54
Nickel	5.25	4.86
Petroleum	5.11	3.51
Copper	4.52	5.21
Lead	3.2	4.85
Asbestos	1.9	1.13
Natural gas	1.22	1.13
Cement	0.89	0.95
Iron	0.85	....
Gypsum	0.79	0.84
Salt	0.75	0.66
Coke	....	0.73

GUSTAVE BEUTELSPACHER,
Commercial Agent.

MONCTON, *April 1, 1898.*

CANADIAN INTERCOLONIAL RAILWAY REPORT.

Consul Beutelspacher, of Moncton, under date of March 14, 1898, says:

The Intercolonial Railway is 1,332 miles long and extends between Montreal, St. John, Halifax, and Sydney. It employs about 1,500 people. The Prince Edward Island Railway, under the same management, is 211 miles long and extends over the island. The two are known as the Canadian Government System.

The report of the minister of railways shows the gross earnings of the Intercolonial for the past fiscal year to have been $2,866,028 and the working expenses $2,925,969, making an excess of expenditure of $59,040. The expenditure was less than that of the previous year by $86,858, and the gross earnings were less by $91,112.

The passenger traffic produced $899,005, an increase of $7,579 over the past year; the freight traffic amounted to $1,687, a decrease of $101,752; and the carriage of mails and express freight produced

$199,972, an increase of $2,571. The earnings per mile were $2,503, a decrease of $86.

The number of passengers carried during the year was 1,501,690, an increase of 29,824, all local traffic. Of freight, 1,295,028 tons were carried, a decrease of 83,590 tons.

NEWFOUNDLAND RAILWAY CONTRACT.

Having had inquiries from residents of the United States in regard to a contract between the government of Newfoundland and Robert G. Reid, of Montreal, I submit the following synopsis of the same:

An agreement entered into at St. John's on the 15th day of March, 1898, between His Excellency Sir Herbert Murray, governor of the island of Newfoundland and its dependencies, and Robert G. Reid, of Montreal, that, in consideration of the grants, subsidies, covenants, provisions, and conditions hereinafter contained and provided on the part of said parties, respectively, to be made, paid, and performed, the said parties mutually covenant and agree as follows:

The Newfoundland Railway, from St. John's to Harbor Grace; the branch now in course of construction from Brigus Junction to Clarke's Beach, and thence to Tilton; the extension now in course of construction from Harbor Grace to Carbonear; the Placentia branch from Placentia to Placentia Junction; the Newfoundland Northern and Western Railway, from Whitbourne to Port-au-Basque; the branch now in course of construction from the Burnt Bay, crossing to Burnt Bay in Notre Dame Bay; the new branch or extension into the west end of St. John's, hereinafter provided for, are and shall be held to be combined and comprehended under one system, which shall be called and known as the Newfoundland Railway.

In this agreement the word "railways" shall mean the track, roadbed, cuttings, embankments, ditches, water ways, diversions, road crossings, bridges, viaducts, culverts and retaining walls, riprap, crib work, sidings, Y's, turntables, water stations and water service, telegraph lines, engine houses, coal sheds, machine shops, machines, tools and appliances; locomotive engines, cars, snow-plow flanges, and other rolling stock; buildings and structures, and all other materials and equipments, the property of the government, in connection with all the line of railway.

The contractor shall, on the 1st day of April, 1898, take possession of said Newfoundland Railway and the several branches thereof, and shall thenceforth maintain, in a safe, efficient, and satisfactory manner, and continuously operate as provided, during a period of fifty years from said date, as follows:

There shall be run at least one passenger or mixed train each way each day (Sunday excepted) between St. John's and Carbonear, between St. John's and Placentia, and between Placentia and Carbonear; and as many additional through or local passenger or freight trains as the demand of traffic may require. There shall be run over the whole system of the said Newfoundland Railway at least three through passenger or mixed trains, when not detrimental to the service, each way every week, and as many through or local passenger or freight trains as the demands of traffic may require.

Should the government at any time during the contract desire to run special trains other than those provided for, the contractor shall furnish and run the same for the government upon receiving reasonable compensation to be agreed upon. The contractor shall provide once in each year, at his own expense, a special train on behalf of the government for the inspection of railways, besides the rolling stock and equipment. The contractor shall provide, subject to the approval of the government, additional rolling stock, equipment, and accommodation as the development and increasing business may require, so that the traffic requirements of the country may be fully met.

All regular trains shall be run in accordance with time-tables approved by the government.

The contractor shall, at his own expense, provide the government with all necessary facilities for transporting the government mails over the whole railway system, and attach a postal or mail car to each passenger or mixed train; the government mail agent to have the exclusive use and possession of such postal car or section set apart for carrying mails, and to be used for government mail matter only. In consideration of said mail service, the government shall pay the contractor a subsidy of $42,000 per annum; the agreement to apply to the conveyance of mails in the colony of Newfoundland only.

The minimum speed of all through trains shall be 18 miles per hour, including stoppages.

The rates to be charged by the contractor for carrying passengers shall not exceed 3 cents per mile for first-class passengers and 2 cents per mile for second-class passengers, for distances more than 25 miles.

The charges for transportation of freight in carload lots shall not exceed 3 cents per ton (of 2,240 pounds) per mile, for distances more than 50 miles and not more than 100 miles. The freight on bulky articles may be charged by measurement, and 50 cubic feet shall be estimated as the equivalent of a ton in weight. For lots less than carloads the classification of freight shall be governed by the Canadian Pacific Railway for Ontario and Quebec; provided that the schedule of rates may, from time to time, be altered or amended by mutual consent.

Each passenger shall be allowed to carry baggage to the extent of 80 pounds in weight, and all baggage in excess thereof may be charged at express rates.

The contractor shall furnish the Government with a quarterly statement, showing the number of passengers and quantities and general description of freight forwarded from each station during the previous quarter, together with the amounts charged for the same, and shall furnish any other information or returns in connection with the line that the government may require.

In consideration of the foregoing covenants on the part of the contractor, the government grants to him in fee simple, in addition to the land subsidies provided for by agreement of the 16th of May, 1893, 5,000 acres of land for each mile of main line or branch railway throughout the entire length of the lines to be operated. The expression "in fee simple" includes with the land all mines, ores, precious metals, minerals, stones, and mineral oils of every kind therein and thereunder.

The lands to which the contractor shall be entitled along the line of railway shall be laid off in blocks or sections of 1 mile in length and 10 miles in depth on each side of the railway on meridian or base lines, to be run as may be found practicable, preserving as nearly as possible the general direction of the line of railway; provided they shall not be held to annul or otherwise affect any grant already made to the contractor. For the purpose of laying off and selecting the blocks to be granted to the contractor and those to be held by the government, respectively, it is agreed that within the year 1898 a survey shall be made, under which the blocks or sections shall be defined and marked off, and the said survey shall proceed with due diligence until all the land along the line shall have been defined and marked off, the selections to be made as follows:

The contractor shall have the right to make the first selection on either side of the Port-au-Basque end of the line, of an area or section consisting of not less than one nor more than five blocks of 1 mile in length. The government shall take the next or adjoining area or section on the same side of the railway, with the option of including in the said area or section any number of 1-mile blocks not exceeding five; upon it being found that any land along the line is barren or swamp, neither party shall be bound to take the same, and either party to whom an area or section would fall in turn of selection shall have the right to reject and pass over such barren or swamp lands and take such area or section from the next suitable land. Upon the selection being made by either party of an area or section on one side of the line, the other party shall have the right to an area or section of an equal frontage immediately opposite on the other side of the line. In order to make up the total quantity or area of land, the contractor shall be entitled to select lands elsewhere within 10 miles of the line, in areas or sections of not less than 1 mile by 10 miles, nor more than 10 miles by 10 miles; the government having the right, in case of every such selection, to an adjoining area or section of equal size. The contractor shall complete his selection of lands within three years from the date of contract, and, until he has made his selections, the government shall not dispose of any Crown lands, timber or mineral rights, within 10 miles of the line of railway. The contractor shall not have the right, under the foregoing clauses, to select or obtain any portion of the lands upon which coal has been discovered, and which were reserved by the government under minute of council dated December 18, 1891. As regards lands to be selected elsewhere than within 10 miles of the line of railway, it is agreed that within the three years the contractor shall have the right to select areas or sections elsewhere, which shall be reserved by the government from grant to any other person until the expiration of said three years.

The survey made shall be under the direction and control of the government. The surveyors, engineers, and other persons engaged for the work shall be appointed and employed one-half by the government and one-half by the contractor, and the cost shall be borne two-thirds by the government and one-third by the contractor.

Lands to be granted by the government under this contract shall be free from taxation as long as they shall remain unimproved or unoccupied.

The government may reserve, within 15 miles of the sea, such timber lands as may be considered necessary for the purpose of providing timber or wood for shipbuilding, and such land within 3 miles of the sea or tidal waters as may be considered necessary for the purpose of public use or settlement, except such land and water side as may be necessary for the efficient operation of the railway, for terminal purposes, and other facilities for traffic.

The contractor agrees to lay new rails upon the line from Whitbourne to the point from which a new line is to be built leading into West St. John's, the government to pay the contractor at the rate of $2,500 per mile; but it is agreed that the total amount to be paid to the contractor shall not exceed the sum of $100,000. The work is to be completed on or before the 31st of December, 1898.

The contractor shall construct a new line or branch railway between Topsail and St. John's, terminating at the municipal basin, which the government agrees to grant to the contractor for terminal purposes. The government shall pay to the contractor for said construction at the rate of $15,600 per mile, but the total amount to be paid shall not exceed the sum of $100,000. The said new branch is to be completed not later than the 31st of December, 1898.

The contractor shall, at his own cost, erect a suitable and sightly depot at the west-end terminus, St. John's, to be completed on or before the 31st day of December, 1900, the plans and specifications to be subject to the approval of the government.

As regards the railway from Whitbourne to Tilton, it is agreed that the contractor shall run at least three passenger trains each way each week between Whitbourne and the junction near Tilton. In consideration of such operation, there shall be granted to the contractor a land subsidy of 2,500 acres per mile.

The following articles shall be admitted into this colony free of duty: Rails, fish plates, fish bolts, and track spikes used in the construction of the branch lines of the line from Whitbourne toward St. John's, as provided for by this contract. The railway shall be exempt from municipal or local taxation. The contractor shall have the right to build and operate such branch lines connecting with the railway as he may consider desirable.

In consideration of the said sale and transfer, the contractor agrees to reassign and transfer to the government 2,500 acres per mile for every mile of railway to be operated under this contract, which shall be deducted from and out of the land subsidies to be granted to him thereunder, except as to the branch line from Whitbourne to the junction near Tilton, in respect of which the contractor shall reassign or deduct 1,250 acres per mile; and to pay to the government the sum of $1,000,000, as follows, viz: One-fourth upon the execution of this contract, one-fourth at the expiration of six months, and one-half at the expiration of one year from the said date.

The government agrees to grant to the contractor, as part or portion of the land subsidies herein provided for, areas of land near Grand Lake in which coal has been discovered, and which have been reserved by the government from sale or grant under minute of council dated the 18th of December, 1891, on condition that the grantee shall so operate to produce not less than 50,000 tons per annum, and shall pay a tax or royalty at the rate of 10 cents per ton of 2,240 pounds on all coal produced in said mines or other mines in the colony.

The government shall have the right to impose the following royalties, and no more, upon minerals raised from the lands granted or to be granted under this contract and the contract of May 16, 1893, viz: Gold and silver, 2 per cent on gross amount of gold and silver mined; copper, 4 cents upon every unit, *i. e.*, upon every 1 per cent of copper contained in each and every ton of 2,352 pounds of copper ore sold or smelted; lead, 2 cents on every ton of 2,240 pounds; iron, 5 cents on every ton of 2,240 pounds; tin and precious stones and other minerals or mineral oils, 5 per cent of their values.

From the time when the contractor shall satisfy the government that he is able so to operate his coal mine or mines as to supply not less than 50,000 tons per annum of coal of good quality, and to continue to furnish such supply, the government agrees to procure the imposition of a duty of not less than $1 per ton upon all coal imported into this colony, upon the condition that the contractor shall supply coal to wholesale dealers at stations on the line of railway where required, at prices to be computed as follows, viz: To the average wholesale price from time to time of Sydney coal in Sydney, Cape Breton, there shall be added the sum of 30 cents per ton, to be computed as follows: For every mile between the mine and the place of delivery, not exceeding 50 miles, 1½ cents per ton; where the distance exceeds 50 miles, but does not exeed 100 miles, 1 cent per ton, but not in any case to be less than 75 cents per ton; where the distance exceeds 100 miles, but does not exceed 200 miles, seven-tenths of a cent per ton, but not in any case to be less than $1 per ton; where the distance exceeds 200 miles, half a cent per ton, but not in any case to be less than $1.40 per ton.

For an improved mail service for the colony, the contractor agrees to provide suitable steamboats for the following routes and services, viz: One steamer to ply between Trepassey and Lamaline and intermediate ports; one steamer to ply in Trinity Bay; one steamer to ply in Bonavista Bay; one steamer to ply in Notre Dame Bay; one steamer to ply between Placentia and Port-au-Basque; one steamer to ply between Port-au-Basque and Sydney, Cape Breton; one steamer to ply between

St. John's, Harbor Grace, or Carbonear and Labrador, east and north. The routes and services to be performed by the several steamers, respectively, shall be subject to the approval of the government. The charges for the transportation of passengers and freight by the steamers shall be the same as provided in respect to the railway. The railway and steamers shall be held to constitute one system.

In consideration of the due and faithful performance of the said service, the government agrees to pay the contractor the several subsidies following, viz: To the steamer on Placentia Bay, for 104 trips each year, at the rate of $100 per trip; to the steamers on Trinity, Bonavista, and Notre Dame bays, for 60 trips each year, at the rate of $130 per trip; to the steamer on the south coast, from Placentia to Port-au-Basque, for 52 trips, at $250 per trip; to the steamer on the west coast, from Port-au-Port to Battle Harbor, for 130 trips, at $300 per trip; to the steamer between Port-au-Basque and Sydney, for 126 trips, at $130 per trip, and when plying between Placentia and Sydney $195 per trip. The steam and mail service shall, except as otherwise provided, be performed and continue for a period of thirty years from the date of this contract.

The government agrees to sell and transfer to the contractor the St. John's dry dock for the sum of $325,000, the dock to be free from municipal or local taxation.

It is agreed that the government transfer to the contractor the control and management of the several telegraph lines in the colony belonging to the government, and all material and other property pertaining thereto, from the 1st day of April next till the 15th day of April, 1904, the contractor assuming all cost of maintenance and operation and receiving the earnings and profits of the lines. The government agrees to pay to the contractor for the performance of the said service the sum of $10,000 per annum, which the contractor agrees to accept in full satisfaction of any loss which he may sustain by reason of any deficit upon the earnings and profits of the lines. It is further agreed that from and after the 15th day of April, 1904, and until the expiration of the said term of fifty years provided by this contract, the contractor shall continue to maintain and operate the said lines and offices free of any charge to the colony by way of subsidy or otherwise.

The contractor agrees, at the option of the government—to be signified within one year from date of this contract—to purchase and take over the interest and property of the government in and to the telegraph lines, material, and property of and pertaining to the government telegraphic system, and to pay the government as compensation or purchase money therefor the sum of $125,000, payable on the 15th day of April, 1904. The said telegraph line and property shall be exempt from municipal or local taxation. All payments of capital are to be made to the contractor in bonds of the colony bearing interest at 3½ per cent, and all annual payments are to be made in cash, quarterly.

The contractor agrees to procure the construction and operation of an electric railway in the town of St. John's, to connect with the west-end terminus of railway, as soon as the latter is completed.

The government agrees, upon the construction of the said street railway, to procure the paving of Water street, St. John's, with granite blocks, from south side road at municipal basin to junction with Cochran street (three-fourths of a mile); between sidewalks to be made of granite blocks, dressed about 4 inches by 14 inches by 7 inches deep and laid over 2 inches of sand, over 6 inches of concrete, on carefully prepared foundation; joints between blocks to be filled with bituminous paving cement; sidewalks on each side to be 10 feet wide, of concrete 6 inches deep; curbing 18 inches deep. The whole is to be finished in a neat, substantial, and workmanlike manner, for which the government agrees to pay the contractor the um of $140,000.

The government agrees to grant to the contractor the exclusive use of Petty

Harbor Pond, or Petty Harbor Long Pond, or such other lakes in the vicinity of St. John's as the contractor may select, for the purpose of providing power for his electric railway. In the event of his selecting Long Pond, the contractor undertakes to construct at his own cost a sufficient water main to and near the west-end terminus, the use of which shall be at the disposal of the St. John's fire department, when necessary in case of fire. The contractor shall not assign or sublet this contract or any portion thereof to any person or corporation without the consent of the government, provided that this clause shall not be held to prohibit or prevent the contractor from raising money upon bonds or mortgages upon the security of the property.

All matters in difference arising between the parties hereto upon any matter connected with or arising out of this contract shall be referred to three arbitrators; one each to be named by the parties hereto and a third to be named by the supreme court or a judge thereof, and the award and decision of two of the said arbitrators to be binding.

The government undertakes to enact all such legislation as may be necessary to give full effect to the contract and its several clauses and provisions, according to the spirit and intent thereof, and also such as may be necessary to facilitate and enforce the collection and payment of fares and rates, the preservation of order and discipline in the trains and stations, and generally to give to the contractor all such powers, rights, and privileges as are usually conferred upon, or granted to, railways and railway companies for the purpose of their business.

By the contract of 1893, Mr. Reid contracted to build the railway for the government, and received in land subsidies 2,500 acres per mile; by his present contract he receives 5,000 acres per mile in addition to the grant of 1893. In consideration of the said sale and transfer, Mr. Reid agrees to reassign and transfer to the government, at the end of fifty years, 2,500 acres for each mile of railway operated under the contract, to be deducted out of the land subsidies, except for the branch line from Whitbourne to the junction near Tilton, of which he shall reassign 1,250 acres for each mile.

The total amount of railway in Newfoundland at present (over all of which Mr. Reid has control) is 775 miles.

The properties assigned to Mr. Reid, exclusive of land subsidies, cost the government: Railway, $12,000,000; St. John's dry dock, $600,000; telegraph lines, $130,000; making a total of $12,730,000, for which Mr. Reid pays the government $1,000,000, out of which subsidies are to be returned for improvements.

The total loss per annum to the government to operate the properties assigned to Mr. Reid is estimated to be as follows, viz: Railway, $300,000; telegraph lines, $18,000; St. John's dry dock, $20,000; making a total of $338,000.

MARTIN J. CARTER,
Consul.

ST. JOHN'S, *April 9, 1898.*

RAILWAY CONTRACT IN COLOMBIA.

Minister Hart sends from Bogotá, under date of March 8, 1898, the following copy of a contract for the construction of a railroad from the port of Girardot to the Savannah of Bogotá:

CONTRACT ADDITIONAL AND REFORMATORY TO NO. 23 OF 1894, RELATIVE TO THE CONSTRUCTION OF A RAILROAD FROM THE PORT OF GIRARDOT TO THE SAVANNAH OF BOGOTÁ.

Manuel Esguerra, Minister of Hacienda, duly authorized by His Excellency the Vice-President of the Republic, charged with the Executive power, on the one hand, and Juan Bautista Mainero and Truco, concessionary of the rights and privileges emanating from contract No. 23 of 1894, on the other hand, have agreed to add to and modify the said contract as follows:

ARTICLE 1.

The Government extends for five years, counting from the date of approval of this contract by His Excellency the Vice-President of the Republic, the time during which the Girardot Railway may be constructed, and the concessionary binds himself to deliver it finished at the end of five years, under the conditions stipulated in contract No. 23 of 1894, and those stipulated in the present.

ARTICLE 2.

The bonds to be delivered to the concessionary in accordance with article 7 of contract 23 of 1894, above mentioned, shall begin to be redeemed in the custom-houses of the Republic as soon as they are delivered to the concessionary, with the exception of those of the Pacific coast, during the time that 50 per cent of their product is set apart for the construction of the Cauca Railroad.

ARTICLE 3.

The concessionary binds himself to exchange, within the five years above mentioned, the present gauge for one of 1 meter (39.37 inches), and to complete, as soon as the exchange is made, all the works and terrepleins necessary, and to also exchange the rails of the line for rails weighing 20 kilograms (44 pounds) a lineal meter (39.37 inches); the locomotives for others not weighing less than 30 tons each, and the rest of the rolling stock for stock suitable for a road of 1 meter gauge.

ARTICLE 4.

The concessionary binds himself to construct the first 10 kilometers (6.215 miles) from Juntas de Apulo toward Bogotá within one year, counting from the date of approval of this contract.

ARTICLE 5.

Unless the foregoing article is complied with, save in case of unavoidable delay duly proven and so declared by the Government, the privilege for the contract to construct the railroad shall be declared null and void.

ARTICLE 6.

The concessionary binds himself to have repaired and renewed in part, within eight months after the approval of this contract, all the rolling stock of the line now in construction and use, so that on the said date there shall be in perfect condition three repaired locomotives, one new 25-ton locomotive, two first-class passenger cars, three second-class passenger cars, twenty freight cars, and four stock cars.

ARTICLE 7.

The concessionary binds himself to enlarge the warehouse at the port of Girardot, so that it may contain the import and export freight, according to the necessities of the traffic, and in order that the company may receive and deliver freight at the said warehouse.

Paragraph.—All local freight for Girardot shall be received and delivered at the railroad station.

ARTICLE 8.

As a guaranty of the obligations which the concessionary incurs by virtue of this contract, and of such contracts as are thereby added to or modified, he shall execute a personal bond offered by a person of recognized reputation and solvency, to the satisfaction of the Minister of Hacienda, for the sum of $50,000 gold, as a fine to revert to the Colombian treasury if the concessionary fails to fulfill all or any of the aforesaid obligations. The respective document, which must be executed as a public deed, shall include a clause stating that the payment shall be made directly at any of the financial bureaus in the city of Cartagena, or at the general treasury of the Republic, at the option of the concessionary, when the Government shall require it on account of nonfulfillment of the contract. In said deed the concessionary and his bondsman shall renounce all right to protection of the law, and they bind themselves separately and jointly with their entire property to be answerable to the Government for the above-mentioned sum.

Paragraph.—This bond shall be on file while the railroad is being built, and shall be canceled as soon as the railroad is finished.

ARTICLE 9.

The following articles and clauses of contract No. 23 of 1894 are hereby declared null and void: Articles 25, 28, 29, 44, 46, and clauses first, third, and fifth of article 33. The said contract No. 23 remains in force in all the parts not mentioned by the present.

ARTICLE 10.

This contract to be valid needs the approval of His Excellency the Vice-President of the Republic, charged with the Executive power.

In faith whereof the present contract is signed in duplicate at Bogotà, the 5th day of January, 1898.

STEAMSHIP COMMUNICATION BETWEEN NEW YORK AND BUENOS AYRES.

Pursuant to section 3 of the act approved March 3, 1891, the Government of the United States grants to any American steamship company that may be formed the sum of $2 per mile for each outgoing voyage for carrying the United States mail, provided—

(1) That its vessels be built in the United States.

(2) That they be constructed of iron or steel.

(3) That they be designed with a view to conversion into auxiliary cruisers in time of war.

(4) That they be capable of maintaining a speed of 16 knots per hour in ordinary weather.

(5) That they possess a gross registered tonnage of not less than 5,000 tons.

Under a similar provision of the same act, the International Navigation Company was enabled to organize, to develop, and to attain a foremost rank among the great steamship lines that now connect Europe with the United States.

PRESENT VOLUME OF TRADE.

Confronted by these facts, and considering the improving conditions of trade between the United States and the countries fronting on the east coast of South America, the project, heretofore often discussed in the United States, of establishing an American line of steamships between the former and the latter countries becomes one of increasing importance to American commerce. To the facts that the demand for such a line can be clearly shown by studying the existing trade relations between the United States and South America, and that this trade will be able to profitably sustain another line, there is to be added the further fact that such an undertaking will materially conduce to the expansion of United States commerce with South America. Although many obstacles have worked against a natural, settled expansion of trade between the Argentine Republic and the United States during late years, changing conditions being largely due to the customs policy of the two countries, our trade with that country has nevertheless gradually, though slowly, increased, as will be seen by the following table:

Year.	Exports from the United States to Argentina.	Imports into the United States from Argentina.
1892	$2,927,488	$5,343,798
1893	4,979,696	5,239,095
1894	4,862,746	3,497,030
1895	4,456,163	7,675,270
1896	5,979,046	9,313,385
1897	6,072,478	10,772,627

It will be seen that the combined trade between the United States and the Argentine Republic in 1897 amounted to $16,845,105, showing an increase of $8,573,819* over the combined trade between these countries in 1892.

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* These figures are taken from Commerce and Navigation of the United States, Bureau of Statistics, Treasury Department.

While the volume of trade of the United States with Uruguay and Brazil has remained more nearly stationary, it is so considerable, especially with Brazil, as to warrant its statement for the proper presentation of the subject.

Trade of the United States with Uruguay and Brazil.

Year.	Uruguay.		Brazil.	
	Exports to.	Imports from.	Exports to.	Imports from.
1892	$939,030	$2,480,890	$14,291,873	$118,633,604
1893	960,606	1,623,380	12,388,124	76,222,138
1894	1,415,171	1,419,573	13,866,006	79,360,159
1895	1,262,001	2,699,648	15,165,070	78,831,476
1896	1,481,200	3,242,428	14,258,187	71,060,046
British trade (1896)	5,407,678	1,568,354	32,430,376	19,727,151

The marked falling off of the exports from Brazil in 1893 and the failure of that country to retrieve its earlier position was largely due to the revolution of 1893 and its injurious after effect upon commerce. Yet, when even the present volume of this trade is considered, it is remarkable that not one steamship flying the American flag has sought to engage therein.

These facts, when taken in conjunction with conditions that will be set forth further on, make the proposition of establishing a new line of steamships to these countries a subject worthy of careful consideration.

The success of such an enterprise must depend—apart from wise and careful management—upon the employment of the proper kind of vessels and the course such vessels will follow.

PROPOSED LINE.

The vessels should possess a speed of not less than 18 knots per hour, in order to supply a fast mail service between the United States and these countries, the need of which has long been felt. The great length of time consumed in direct transit, and the irregularity of arrival at Buenos Ayres of the mails from the United States, have been sources of just complaint by business houses in this country dealing with American firms, and serious drawbacks to the enlargement of our trade in Brazil and the Argentine Republic. At present, the practice has been adopted in business circles of transmitting and receiving correspondence via Europe, by which route it reaches its destination more regularly and equally as soon (in about thirty days) as by the direct route. The construction of these vessels should furthermore be designed with special regard to freight traffic and, in that connection, to the classes of merchandise and products that will form the bulk of the cargo. In addition to these considerations, they should possess accommodations for a limited number of first and second class passengers—for instance, seventy-five of the former and fifty of the latter—together with the latest and most practical improvements in steamship equipment.

Concerning the course to be prescribed, it seems advisable that it should be determined, without sacrificing too much to a deviation from the shortest route, by the important consideration of gathering as much passenger and freight traffic as possible.

To this end, the following course seems strongly to recommend itself: New York, Santa Lucia (for coaling), Para, Pernambuco, Bahia, Rio de Janeiro, Santos, Montevideo, and Buenos Ayres.

The distance from New York to Buenos Ayres via these intermediate ports is 6,300 miles. Running at a speed of 18 knots per hour, or 495 statute miles in twenty-four hours, it can be traversed in thirteen days. Allowing six hours each for stoppage at Santa Lucia, Para, Pernambuco, Bahia, Santos, and Montevideo, and twenty-four hours at Rio de Janeiro, which, under normal conditions, should give ample time for coaling and the shipment and discharge of passengers and cargo at these ports, the total time consumed in the voyage would not exceed sixteen to seventeen days, at the most.

ESTABLISHED LINES.

The lines of steamers now regularly plying between New York and Buenos Ayres are the Norton Line and the Prince Line, both British companies. The Norton Line makes direct bimonthly passages from New York to Montevideo and Buenos Ayres, without touching at Brazilian ports on the outgoing voyage, The vessels of the Prince Line, which are cargo boats with accommodations for a limited number of passengers, make bimonthly voyages between the abovementioned terminals and call on their northward route at Santos, Rio, Bahia, and Pernambuco. The fastest vessels of these two lines average twenty-eight days in making the voyage.

The Lamport & Holt Company, which is also British, runs a freight steamer once every month between New York and Buenos Ayres. The regular passenger steamers of this line go no farther south than Rio, and transfer their passengers for Buenos Ayers to the several European lines touching at Rio en route to Buenos Ayres. In addition to these, there is also a trimonthly steamship service between New York and Para. The carrying capacity of these latter vessels is 1,500 to 2,000 tons, which frequently proves inadequate, and freight, in consequence, is left on the dock, and cargoes are subjected to 10 days' delay.

The average time made by the Lamport & Holt vessels between

New York and Rio is about twenty-two to twenty-three days. Add to this the four days' voyage from Rio to Buenos Ayres by the fastest vessels calling at Rio from European ports, and the total time consumed, not including any delay that may be incurred in making connections at Rio, will be found to be twenty-seven to twenty-eight days between New York and Buenos Ayres.

Under the proposed new American line, the voyage would be shortened ten days, a saving of time of the greatest value in postal communication, and of material assistance in increasing passenger intercourse with South American countries, and in the consequent development of our commerce.

SPEED AND COAL.

The speed of 18 knots suggested as a prerequisite for the success of this contemplated line could be secured by the use of high-pressure triple-expansion engines, with the liberal estimation of a consumption of 150 tons of coal in twenty-four hours, or 2,550 tons in seventeen days. Allowing 20 per cent, or 1,000 tons, of the total tonnage of the vessel for coal space, it would be necessary for each vessel to coal twice on each voyage. The prices of coal (gold) and the ports best suited for coaling are given in the following table, the date being taken from an official coaling report of a United States war ship for the year 1897:

Place.	Kind of coal.	Cost.	Facilities for coaling.
Bermuda	Pocahontas	$7.14	Good; lighters.
Santa Lucia	Pocahontas	4.32	Excellent; dock.
Barbadoes	Cardiff	6.09	Good; lighters.
Pernambuco	Cardiff	8.88	Fair; lighters; inside breakwater or reef; good.
Rio de Janeiro	Welsh	9.73	Good; lighters.
Buenos Ayres	Cardiff	7.50	Good; dock.

While the prices of coal, of course, fluctuate at these ports, the above figures may be taken as a fair average of prices within the last few years.

PASSENGER TRAFFIC.

It now remains to consider the traffic in which this line would engage. It will hardly be questioned that it would secure almost the entire passenger trade between the terminal, as well as the intermediate, ports. While it is somewhat difficult to arrive at reliable statistics of the number of passengers that travel annually between these ports, it is not hazardous to say that the number is sufficiently large to be regarded as an important item in the receipts, and that it would constantly increase with the improved facilities for travel offered by such an enterprise.

PASSENGER RATES.

Where distances are given in the following statement, they are meant to be taken from anchorage to anchorage by the ordinary sea routes, except across the Atlantic, where they are taken by the great circle routes, and are expressed in nautical miles. The present rates are as follows, in American gold dollars:

Lines.	Routes.	Distance.	Class.		
			First.	Second.	Third.
		Miles.			
Lamport & Holt	New York to Rio de Janeiro		$150		$50
	New York to Buenos Ayres		175		60
Norton	do		160		
Prince	do		160		
Not named (trimonthly)	New York to Para		100		
	Para to New York		90		
Royal Mail Steam Packet Company.	Buenos Ayres to Montevideo	125	8		
	Buenos Ayres to Rio de Janeiro.	1,171	50	$30	15
	Buenos Ayres to Bahia	1,916	80	50	30
	Buenos Ayres to Pernambuco	2,310	90	50	30
	Buenos Ayres to Southampton	6,374	$175 to 200	100	50
Pacific Steam Navigation Company.	Buenos Ayres to Montevideo	125	8		
	Buenos Ayres to Rio de Janeiro.	1,171	50	30	15
	Buenos Ayres to Bahia	1,916	80	40	25
	Buenos Ayres to Pernambuco	2,310	90	40	30
	Buenos Ayres to Liverpool	6,225	175	85	45
Compagnie des Messageries Maritimes.	Buenos Ayres to Montevideo	125	6 to 8	5	4
	Buenos Ayres to Rio de Janeiro	1,171	36 to 56	25	16
	Buenos Ayres to Bahia	1,916	75 to 110	40	30
	Buenos Ayres to Pernambuco	2,310	90 to 120	45	35
	Buenos Ayres to Bordeaux	6,225	140 to 200	80	50
North German Lloyd *	Buenos Ayres to Montevideo	125	10		5
	Buenos Ayres to Bremen	6,818	150		45
Hamburg-Südamerikanische Dampfschifffahrts-Gesellschaft.	Buenos Ayres to Rio de Janeiro	1,171	40		12
	Buenos Ayres to Bahia	1,916	60		30
	Buenos Ayres to Hamburg	6,920	150		46

* The North German Lloyd rarely stops at Brazilian ports.

The distances and rates of passage to the intermediate ports of stoppage between Pernambuco and the European terminals are not given here, as they are immaterial to the question under consideration.

FREIGHT AND FREIGHT RATES.

The chief exports of the United States to Brazil, Uruguay, and the Argentine Republic are lumber, agricultural machinery, kerosene, and general merchandise, such as hardware, iron tools, hooks, and cotton goods.

The chief imports of the United States from Brazil are coffee, sugar, and rubber; from Uruguay, hides and wool; and from the Argentine Republic, hides, wool, flaxseed, hair, and sugar.

In detailed statement, the exports of the United States to the Argentine Republic are as follows: Sackcloth, cotton goods, binding twine, cotton duck, oils of various kinds, turpentine, patent medicines, empty casks and shooks, furniture, pine and spruce and various other kinds of lumber, books and printed sheets, house and kitchen utensils, sewing machines, various machinery, steam motors, plows, separators, spades, picks and shovels, threshing machines, iron tools, iron utensils, iron manufactures, stone coal, kerosene, and other articles.

Exports of the Argentine Republic to the United States: Horns, hair; goat, kid, and sheep skins; dry and salted cowhides, wool, wax, preserved meat, flour, cabinet woods; carpincho, nutria, and various skins; ostrich feathers, hide cuttings, guano, bones, dried blood, salted and dry sausage casings, rags, and other articles.

The Argentine Republic imports from Brazil cacao, coffee, fariña, yerba mate, crude sugar, tobacco, dimension stones, fruit, and other articles; and exports to that country horses, hogs, sheep, horned cattle, jerked beef (tasajo), linseed, corn, potatoes, baled hay, wheat, flour, butter, timber, beans, and other articles.

The freight rates of the chief articles of export and import are:

From and to—	Articles.	Freight rates.
Buenos Ayres to Rio de Janeiro	Cereals	$2.19 to $3.65 per ton.
	Hay	$2 to $2.50 per 40 cubic feet.
	Dried beef	$4 per ton.
Buenos Ayres to Bahia	do	$6 per ton.
Buenos Ayres to Pernambuco	do	$7 per ton.
Buenos Ayres to New York		$5 per ton and $4 per 40 cubic feet.
Rio de Janeiro to Bahia	Coffee *	35 to 42 cents per bag † and 5 per cent primage.
Rio de Janeiro to Pernambuco	do *	49 to 56 cents per bag and 5 per cent primage.
Rio de Janeiro to Para	do *	70 to 80 cents per bag and 5 per cent primage.
Rio de Janeiro to New York	do	35 cents per bag.
Bahia to New York	do	Do.
	Sugar	$3.65 per ton.
Pernambuco to Para	do *	8⅛ cents per 15 kilograms (33 pounds).
	Rum *	$4.36 per pipe and 10 per cent primage.
Pernambuco to New York	Sugar	$2.40 to $3.65 per ton.
Para to New York	Rubber	$8 per ton; 25 cents per cubic foot.
New York to Pernambuco	General freight	30 cents per cubic foot and 10 per cent primage.
New York to Bahia	do	41 cents per cubic foot and 10 per cent primage.
New York to Rio de Janeiro	do	30 cents per cubic foot and 10 per cent primage.

* Amounts given in milreis and reduced to American money at the rate of 14 cents per milreis, the latest official value.

† Bags of 132 pounds.

DIRECT TRADE WITH NEW YORK.

The value of the direct imports and exports of New York from and to Brazil, Uruguay, and the Argentine Republic during the fiscal years 1895 and 1896 was as follows:

Countries.	New York.			
	1895.		1896.	
	Imports.	Exports.	Imports.	Exports.
Brazil	$69,298,288	$11,091,495	$63,712,131	$10,674,519
Uruguay	2,572,254	1,020,958	2,759,933	1,162,928
Argentine Republic	4,127,597	3,780,110	5,135,419	4,574,328
Total	75,998,139	15,881,563	71,607,413	16,411,775

INTERMEDIATE TRADE.

To these figures must be added those of the intertraffic between the ports of stoppage, which is considerable. The bulk of this trade is between Buenos Ayres and the ports of Brazil, and amounted in 1895 to $12,191,770 and in 1896 to $14,994,081. The grand total of this freight trade may, therefore, be placed at from $102,000,000 to $110,000,000 per annum. It must be reasonably supposed that a line such as is contemplated would secure a fair proportion of this trade. Its great superiority over the three other competing lines would quickly secure for it the advantage in any commercial contention that might arise; and, should it be found expedient, it might enter into a freight-rate agreement with the other established lines, such as now partially exists between the latter.

SHIPPING.

The following table will show to what extent American vessels have participated in this trade:

Table showing the entrances and clearances of vessels, sail and steam, at the port of New York, from and to Brazil, Uruguay, and the Argentine Republic, during the fiscal year 1896.

From and to—	Entered.				Cleared.			
	American.		Foreign.		American.		Foreign.	
Sail.	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Brazil	8	4,390	29	17,915	37	24,712	51	24,818
Uruguay	3	2,626	5	3,110	3	2,388	2	1,906
Argentine Republic	9	6,855	15	8,694	11	7,753	11	9,381
Total	20	13,871	49	29,729	51	34,853	64	36,105
Steam.								
Brazil	....	....	176	243,903	....	....	92	131,470
Uruguay	....	....	....	....	....	....	6	8,814
Argentine Republic	....	....	23	35,039	....	....	34	51,725
Total	....	....	199	278,932	....	....	132	192,009
Total sail and steam	20	13,871	248	308,661	51	34,853	196	228,114

There are four interesting facts that become apparent from a consideration of these figures: (1) That the combined trade between the port of New York and Brazil, Uruguay, and the Argentine Republic amounted in 1895–96 (an average year) to $103,013,339; (2) that of the 184 sailing vessels of a total tonnage of 116,558 tons that participated therein, only 71 were of American nationality, with a combined tonnage of 48,724; (3) that of the 331 steam vessels of a total tonnage of 470,941 tons that participated therein, not one flew the American flag; and (4) that the total tonnage of sailing vessels, American and foreign, amounted to the small figure of 116,558 tons, as contrasted with the total steam tonnage of 470,941 tons.

If the vessels of the proposed line are constructed in accordance with the provisions of the act of March 3, 1891, already cited, each vessel would receive $2 per mile, or $12,600 for each outgoing voyage. By making bimonthly voyages, the company would receive from the United States Government $25,200 per month, or $302,400 annually, for carrying its mails.

PROFITS AND DIVIDENDS.

As the Lamport & Holt, the Norton, and the Prince lines are private nonsubsidized companies, it has not been possible to secure reliable information concerning their profits and dividends. From all indications, however, there is reason to believe that they are highly prosperous, and current rumor places their annual dividends at 15 and 20 per cent. The following table gives the status of several of the most important European lines, as derived from their annual reports and from official statistics. Considering the vast number of lines engaged in the European-American trade and the consequent large competition, the result of their operations is, as will be seen, in every way satisfactory.

Lines.	Capital.	Profits.		Dividends.	
		1895.	1896.	1895.	1896.
				P. ct.	*P ct.*
Royal Mail Steam Packet Company	$4,379,850	$1,141,622	$1,009,672	3	3
Compagnie des Messageries Maritimes	11,580,000	951,124	907,788	6	5½
Chargeurs Réunis	2,412,500	413,251	411,683	*5	*5
Société Generale de Transports Maritimes à Vapeur	1,737,000	232,999	341,250	5	6
North German Lloyd	9,520,000	1,249,796	1,804,628	....	4
Hamburg-Amerikanische Packetfahrt-Actien Gesellschaft	7,640,000	1,426,312	2,015,408	5	8
Hamburg-Südamerikanische Dampfschifffahrts-Gesellschaft	3,570,000	430,118	643,507	12	7

* On general stock; on preferred stock, 75 per cent, 16 per cent, and 9 per cent.

The dividends declared form, as will be seen, only the smaller portion of the profit of the companies, the greater portion being placed to the accounts for repair and renewal, for insurance, and to the capital account, under which latter heading a large sum is written off annually for depreciation in value of ships and plants. The amount is fixed by the several companies at about the fourteenth to the eighteenth part of their capital, viz, from 5.4 to 7.2 per cent thereof.

SUBSIDIES.

The amount received by the Royal Mail Packet Company from Government contracts and postal services is variable. In 1894 it was £107,957 ($525,374); in 1895, £106,472 ($518,136); and in 1896, £102,135 ($497,040).

According to articles 5, 6, and 7 of the French law of January 30, 1893, sailing vessels above 80 tons and steam vessels above 100 tons, constructed in France, receive the following annual bonus or subventions:

Steam vessels, 1.10 francs (21 cents) per ton gross tonnage, and sailing vessels, 1.70 francs (32 cents) for every 1,000 miles traversed, subject to an annual decrease of 6 centimes (1.1 cents) for wooden vessels and 4 centimes (0.7 cent) for steel vessels from the first year after their construction. The bonus is increased 25 per cent on vessels the designs of which, previous to construction, have been approved by the French Government.

The North German Lloyd receives no subsidies in the South American itinerary, but receives, under the Reichsgesetz of April 6, 1885, 4,000,000 marks ($952,000) annually for carrying the German mail to East Africa and Australia.

The Hamburg-Südamerikanische Dampfschifffahrts-Gesellschaft steamers are chiefly freighters, not subsidized. Their tonnage runs from 2,000 to 5,000, with a speed of 12 to 12½ knots per hour.

CONCLUSION.

The object of this memorandum has been to present in succinct form the essential conditions which would have to be considered, under existing American law and in view of statistical records, official reports, and public documents, in establishing a fortnightly fast mail steamship service between the ports of New York and Buenos Ayres. These conditions, briefly related, are:

(1) An annual allowance of $302,400 from the United States Government for carrying its mails.

(2) An annual freight trade of over $100,000,000 in which such a line would participate.

(3) Freight charges to and from the terminal and intermediate ports.

(4) Existing passenger rates.

(5) The total absence of American steamships engaged in this trade.

(6) Character and nationality of the steamships at present engaged therein.

(7) Coaling facilities and coal prices.

(8) The successful results obtained by foreign lines running from Europe to Brazil and the Argentine Republic, though operating under the disadvantage of great competition.

(9) The general demand for such a line by business houses.

That all these conditions are favorable to the establishment of a direct line between the United States and the Argentine Republic can not be gainsaid. If it can be shown to be a profitable investment at the present time, how much more so must it become in the future. For every American who ventures, with the present deficient traveling facilities, upon a thirty days' journey to the Argentine Republic in the pursuit of business or pleasure, there will be a dozen or more who will undertake the voyage when it can be accomplished on first-class vessels in a fortnight. A fast mail and passenger line of steamships will be of more service than any other means in conveying to each country a practical knowledge of the resources and natural advantages of the other; it will bring safer and quicker delivery of goods, and consequent cheaper insurance. Above all, in drawing by natural means these South American countries nearer to the United States than to Europe, it will help to win from the latter its chief medium of maintaining its commercial supremacy in South America.

FRANÇOIS S. JONES,
Chargé d'Affaires ad interim.

BUENOS AYRES, *February 3, 1898.*

RAILWAY AND STEAMSHIP ENTERPRISES IN GUATEMALA.

Consul-General Beaupré writes from Guatemala, April 2, 1898:

On the 23d ultimo the National Assembly of this Republic formally empowered President Cabrera to sell or lease the Northern Railroad of Guatemala, or to make such contracts as will insure its completion in the shortest time possible and be most advantageous to the nation.

This step is of the greatest importance to the export trade of the United States. This railroad is now completed from Puerto Barrios, on the Gulf of Honduras, to El Rancho San Augustine, a distance of about 133 miles, and the surveyed line from that point to this capital is about 56 miles. While the construction will be difficult for this distance, it is entirely practical, and the road can be built in two years. The engineers have estimated the cost at about $2,500,000 gold.

This road was projected by President Barrios, and it has been the ambition of his successors to complete it as a national enterprise. Foreign syndicates have often endeavored to buy or lease it, but until now it has been impossible. The reason for the change of sentiment is that the financial condition of the country does not warrant the appropriation of the public funds for its construction.

When completed, the bulk of the exports and imports will be carried over this line. Puerto Barrios is about 800 miles from New Orleans, and the heavy sea freights which American goods have had to pay on the long voyage from San Francisco or via Panama will be much reduced. American merchants can travel comfortably and quickly to this market, and our trade will greatly increase.

The value of this railroad as an investment is well understood by foreign capitalists, and I believe there is not the slightest doubt of its completion within three years. It would be well for Americans who desire to place money in foreign enterprises to investigate this railroad. A valuable concession can be had, and the completed road purchased for less than half its original cost.

The Pacific Steam Navigation Company, an English corporation, and the Chilean Compania Sud America de Vapores have for some time been jointly endeavoring to increase their Pacific coast trade, and, as a result of their negotiations, the National Assembly on March 26 authorized the President of this Republic to enter into a contract with these steamship lines to carry the mails between the ports of Valparaiso, Chile, and Ocos, Guatemala, giving them a subsidy of $15,000 per year, that sum to be increased to $30,000 per year when the steamers shall run to San Francisco. Boats must stop at least once a week at Guatemalan ports, and the tariff of transportation is to be fixed before the signing of the contract. This will interfere with the interests of the Pacific Mail Steamship Company, an American enterprise, which has long controlled the Pacific coast trade.

UNITED STATES WAREHOUSE IN VENEZUELA.

Last night there was opened in this city, with great ceremony and amid brilliant surroundings, a permanent exposition of American wares, under the auspices of the National Association of Manufacturers of the United States of America. The association has secured one of the largest and handsomest buildings in Caracas for its exposition, and no reasonable expense in the matter of decoration and convenient arrangement has been spared in remodeling it for its present use. It is expected that the leading manufacturers of the United States will send large and characteristic exhibits of their wares to this exposition, thus giving the buyers here an opportunity to examine goods and prices in a satisfactory way before purchasing. This enterprise is not a money-making one, and no goods are to be offered for sale in the exposition.

It is proposed to display the best results of a century of progress in mechanical invention and industry, in order to give the people here an adequate idea of the resources and achievements of the United States as a manufacturing nation.

I have been able, acting in an unofficial way, to interest the Government in the exposition project, and have secured very considerable advantages for the association.

The Venezuelan Government has displayed, from the time I first conversed with the President on the subject, a very real and effective interest in the enterprise. The President himself has lost no opportunity of manifesting his appreciation of the importance and significance of the proposed exposition. He has frequently said he was glad to see Americans making this pioneer movement in the direction of broader trade relations, and has requested me to ask for his assistance whenever it could be of service to the undertaking. I want particularly to emphasize the generous, cordial, and intelligent cooperation which this enterprise has received from President Andrade and his countrymen.

The delegation of American manufacturers which came to the opening of the exposition has received very handsome treatment. Its members have been the guests of the nation, as it were, and have been much honored and superbly entertained by the Government.

The opening of the exposition last night was a very brilliant function. The most important people of the country were present. The diplomats, the army, and the cream of the business community and of social life were handsomely represented. The President furnished the national band for the evening. Throughout the exercises American sentiment ran high, and there is no doubt that the business men of the United States now have the most favorable opportunity that has ever been presented to find new markets here.

I inclose a copy of the speech delivered by President Andrade; also, the printed programme of the evening, and a portion of the Venezuelan Herald containing an account of the exercises.

FRANCIS B. LOOMIS,
CARACAS, *March 30, 1898.* *Minister.*

SPEECH OF PRESIDENT ANDRADE.

GENTLEMEN: At the present epoch of our national existence, I attach the greatest importance to this display of progress, for it is a transcendent step toward the commercial development of our Republic.

The great nation of North America, in that spirit of friendliness ever manifest, has come to exhibit to us, and to offer for competition in our markets, its perfected products, and to show to us the results of its progress and of its powerful industrial forces.

I extend a cordial greeting to the great Republic of the north, and to its distinguished representatives here to-night.

I believe the Association of American Manufacturers will find among us something more than favorable markets; it has come to take a place in our homes, as a further assurance of that fraternal feeling between two nations worthy of being friends, for in both are the attributes of greatness.

The United States is marching to the front, and we will strive to follow in its triumphal wake—we, a young Republic, fully alive to the necessity of progress; the United States, formed into a powerful democracy, shedding light from the pure federalism of its institutions over the whole of America, and at the same time illuminating the continent with the flash from its furnaces, which are furnishing to mankind the great and marvelous works of an enlightened civilization.

We Venezuelans owe a solemn debt of gratitude to the country of Washington, and, while we open to its citizens our markets for their industrial products, we also extend to them the right hand of fellowship and a heart full of appreciation for kindness shown to us.

Gentlemen of the association, welcome to the land of Bolivar.

For the great Republic of the north, this exposition in a foreign land is the direct result of that perfect idea which a civilized nation has of peace, labor, and liberty; and furnishes to us a splendid example of what is really meant by liberty, labor, and peace in the life of a thoughtful, intelligent, and industrious people.

I experience a personal satisfaction to think that the powerful Republic of the north has come to our shores, offering us the fruit of its experience and the results of the genius and industry of its citizens.

We have an intelligent and honest people, who are desirous to work; our ports are open, and no protective tariff bars the way to civilizing elements or shuts out foreign products. Vast fields and rich mountain sides offer a bounteous return to those who wish to cultivate and explore them.

The Government of Venezuela, thoroughly cognizant of the purposes for which its institutions were created, is aware of the national needs of the present day. With order firmly established, political and civil rights guaranteed by our laws, the execution of which is intrusted to discreet and responsible officials, I believe—as I have heretofore said—that our nation, as an integral part of the civilized world, is now ready to have recorded upon the pages of history that the cherished plan of reorganization has been completely realized, and our people are now prepared to devote themselves to the arts, business, and industrial pursuits.

The hour has arrived for serious thought as to the development of our latent forces; as to the methodical and scientific investigation of our natural riches, as yet unexplored; and, above all, as to the colonization of our extensive virgin lands with an element calculated to maintain our nationality and which, by the combined development of all the social energies, will place our nation in its destined rank among the civilized nations of the world.

As Chief of State, I desire to see all citizens protected in the peaceful exercise of their rights, earnestly praying for the general welfare of the whole country, and I am firmly convinced that by labor alone will we attain this desired end.

Gentlemen, I am extremely desirous that our commercial relations with the United States may continue to increase day by day, and I sincerely trust that this exposition, inaugurated to-day by the American manufacturers, may produce the favorable results we all desire, for the development of the commerce between the two countries and for the general progress of Venezuela.

And now, Señor Director, I congratulate you heartily upon the realization of this great and important undertaking, and I fervently hope that your energetic efforts in this direction will be crowned with the most complete success.

PROGRAMME OF THE INAUGURATION OF THE PERMANENT EXHIBITION OF AMERICAN WARES AND MANUFACTURES IN CARACAS, MARCH 26, 1898.

(1) Reception of invited guests and inspection of exhibit.

(2) Venezuelan national air by the military band upon the arrival of the President of the Republic.

(3) American national air by the same band upon the arrival of the envoy extraordinary and minister plenipotentiary of the United States.

(4) Opening by Gen. Alejandro Ybarra and Dr. Lucas Ramella.

(5) Speeches—Mr. Rudolf Dolge, the President of the Republic, the American minister, and Mr. Edward H. Sanborn.

(6) Lunch, donated by the following members of the association: National Biscuit Company, J. H. Michener & Co., Urbana Wine Company, Rheinstrom Bros., Stephen F. Whitman & Son, H. J. Heinz & Co., D. G. Yuengling & Son, Libby, McNeil & Libby.

EXTRACTS FROM THE VENEZUELAN HERALD, CARACAS, MARCH 29, 1898.

An event to which we can not attach too much importance will take place this evening. We allude to the inauguration in this city of the exposition of the National Association of American Manufacturers. It is a new departure in commercial methods by the Americans, by which they show their determination to enter into open competition with the nations of Europe for the supply of Venezuelan markets, and to devote themselves to the daily study of the needs of a country whose tastes and customs differ entirely from ours.

By means of this exposition, our manufacturers will be able to obtain information, to compare their products with those of other nations, to recognize the causes of their inferiority, and to remedy them.

By means of it, also, Venezuelans will be enabled to perceive that the United States are in the front rank, and that many of their products compare favorably with those from Europe. In an especial degree we hope that this exposition will induce our manufacturers to recognize the fact that Latin America is not the United States, and that, in order to procure and retain a large custom, it is absolutely necessary to know how to pack, and just as necessary to give credit.

At the present moment, the Europeans are easily masters of the commercial situation here, and if the Americans desire to oust them, they have only to follow in their footsteps and to imitate their methods. If they fail to do this, they will soon discover to their cost that to change the habits of a people of the Latin race is a herculean task which we will never advise our manufacturers to attempt. We are persuaded that in writing this we are not playing the useless rôle of a Cassandra; and, as this article is going to press just as the exposition is being toasted, we beg to offer our best wishes for their success and prosperity to the National Association of American Manufacturers.

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The site could not have been better chosen; it is in the heart of the town, in the center of its busiest section. The building is one formerly occupied by the Bank of Venezuela, and is an imposing edifice, with a frontage of 120 feet and a depth of 230 feet. There is a garden, which will be devoted to the exhibition of agricultural instruments, windmills, machinery, etc.

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Mr. Rudolf Dolge, the special commissioner of the association, said:

Mr. President, Ladies, and Gentlemen: Ten years ago, the Congress of the United States enacted a law authorizing the President of the United States to issue a call to the sister republics of Central and South America, inviting them to attend a meeting for the purpose of considering ways and means for the augmenting of existing trade relations between the respective countries.

That invitation was accepted by the people of Venezuela, who sent four delegates, among them Señor José Andrade, to represent their interest at the great Pan-American Congress held at Washington, D. C.—the first great effort to cement the commercial relations between the two countries.

Seven years later, in January, 1895, a meeting of a small but important group of American manufacturers took place at Cincinnati, Ohio, for the purpose, among others, of discovering ways and means for extending their trade with their southern neighbors, and as the result of their deliberations they adopted in their platform the following, as one of the specific objects of their association:

"Extension of the foreign trade of the United States by the study of foreign markets and the establishment of exhibition warehouses in important centers of trade abroad."

Two years ago, a representative of this association of manufacturers visited Venezuela and, impressed with the fact that, while the United States was buying about two-thirds of all products exported by Venezuela, this country was buying only about one-tenth of her requirements in the way of manufactured products from the United States, he at once in a most forceful argument presented to the executive committee of the association the advantages of making its initial warehouse experiment in Venezuela.

The executive committee acted promptly in the matter, and at once sent a representative to Caracas to make the necessary preliminary arrangements. The cordial reception given to him and the hearty aid granted in a most disinterested manner by your Government, by all officials, the leading organizations, the merchants, and the people in every walk of life, call for the profoundest gratitude on the part of the association and the people of the United States in general. But, although so auspiciously launched, an undertaking of such far-reaching importance naturally required time for proper development; every step taken had to be carefully considered, and thus nearly two years elapsed ere tangible results of the great amount of work and effort are at hand. Much still remains to be done—we have only begun, and it will be many weeks, yes months, before all that is aimed at can be accomplished.

But a beginning at least has been made, and you have honored us this evening with your presence to wish the undertaking God speed, and in the name of the National Association of Manufacturers of the United States, I extend to you all a most hearty welcome, as well as sincere thanks and appreciation of the courtesy and interest which you have manifested by your attendance.

I believe this enterprise marks a most distinct advance in modern commercial history. Representing, as it does, not merely the well-directed effort of a few private individuals, it means the intelligent application, along the broadest possible lines, of the most progressive methods for the advancement of commercial relations between two countries, whose destinies are bound by the ties of a friendship which has grown stronger and stronger from year to year.

Essentially an experiment, requiring strong backing and the ability to meet all demands made upon it, such an effort is possible only by concerted action—and it needed the great organization of the National Association of Manufacturers of the United States to put the undertaking on its feet.

The National Association of Manufacturers, which was the result of that meeting held three years ago at Cincinnati, Ohio, is a business organization which embraces within its membership over 1,000 of the largest manufacturers in the United States, representing practically every important branch of productive industry. The purpose of the association is to promote the interests of the American manufacturers in the home country by the improvement of business conditions, and abroad by the extension of the foreign trade in the products of American industry, through the establishment of sample warehouses—of which this is to serve as the model type.

As the association neither buys nor sells goods, but is interested in bringing together buyers and sellers and in facilitating their transactions by supplying any needed information, this institution is not intended to be operated with any view of profit for the association. It is thoroughly a "national" enterprise, to be conducted along the broadest possible lines, and, as such, designed to be merely self-sustaining.

The warehouse is intended to serve as a permanent exhibition and as a bureau of information, both for the Venezuelan buyers and for the members of the association, rather than as a store for the actual sale of goods. Its aim is to bring American goods before the buyers in Venezuela more prominently than is possible by any other means now available.

In this way, the warehouse will enable the Venezuelan public—

First. To examine under favorable conditions the various lines of American goods for which Venezuela affords a market. They will be able to examine the actual merchandise—not illustrations or models.

Second. The public—merchants as well as consumers—will be able to obtain all desired information about the goods, their cost, manner of sale, etc., and they may also compare them with other similar goods with which they are more familiar.

Third. The public will have access to the catalogues of many manufacturers not represented in the exhibits, and will be placed in communication with the makers of any particular article which they may desire to obtain.

Fourth. Files of American newspapers, trade journals, Government publications, directories, and reference books will be at the disposal of those who may desire to make use of the facilities of the library to be established in connection with the institution.

Fifth. One of the special objects will be to show, as far as possible, in actual operation, agricultural implements of all kinds suited to the conditions of the country. To this end particularly, the kind cooperation of your Government has been promised, as there is no one branch in which the great public benefit of the institution can be so thoroughly demonstrated as in this.

Among the special advantages which it is intended to afford American manufacturers may be mentioned the collection of every kind of information of value to those who may desire to do business in Venezuela.

The institution will serve as headquarters for representatives of the exhibitors who may come to Venezuela for the purpose of selling goods or investigating the market, assisting them in every possible way, particularly with information and advice concerning trade matters. Reliable reports regarding new enterprises and business opportunities are to be obtained and promptly communicated to those whom they may interest.

This latter feature should in course of time become of especial advantage to the development of Venezuela; for with a true knowledge of the actual conditions, with accurate and reliable information regarding the wonderful natural resources and riches of this country, American capital and enterprise is far more likely to seek new channels of investment than in what is at present an almost unknown field.

Such, then, is the proposed sphere of the work. While, as a matter of course, it will take some time before the organization is thoroughly perfected, it is quite apparent that the possibilities for good to be accomplished by the establishment of this institution are practically unlimited, and with the good will and kindly assistance that has hitherto been shown to this enterprise by the people of Venezuela, as well as by your Government, the association feels that the success of the undertaking is practically assured in advance.

SPEECH OF MINISTER LOOMIS.

This gathering of representative citizens of Venezuela and of the United States is fresh proof of the cordial relation that exists between the two countries. It is a meeting full of promise. It means that the expressions of good will and friendship which we have addressed to each other have a substantial basis, and that this harmony of feeling is to produce a more practical result than the mere exchange of compliments. It means, I trust, that the people of South America and those of North America have formed closer commercial ties and have united their great energies in the work of developing the measureless resources of the New World. Our interests are, in the main, similar; and our destinies must, in the end, with such modifications as local conditions impose, be identical.

The manufacturers of the United States have a double purpose in seeking to establish this exposition. They desire to display here the best results of a century of New World endeavor in mechanical invention and industrial activity. They want to give the people of Venezuela, who have been largely an agricultural people, an opportunity to study, if they so desire, the industrial achievements of the United States, to the end that their own advance along the pathway of prosperity that we as a nation have so happily trod may be facilitated. This exhibition will also show how ready and capable are the manufacturers of the United States to supply the needs of the other peoples of the three Americas, until they are prepared to become manufacturers on their own account. The fruits of our experience are at your command, both here and in our colleges and technical schools at home. We like to have your young men come to us to learn our language and ways.

The welcome presence and gracious speech to-night of Venezuela's distinguished and honored President, General Andrade, is convincing evidence of his good will and that of this Government toward this enterprise, and emphasizes its international character. The address recently made in New York by President McKinley before the National Association of Manufacturers, in which he condensed with graphic felicity into a few paragraphs the genius of our whole need and theory of commercial expansion, indicates the genuine sympathy which this and every other worthy effort of a similar nature may expect from the Administration at Washington.

I am proud of my countrymen, and glad to see them closing a century of matchless industrial achievement by the inauguration of a permanent exposition of their own products on the continent of South America. This is the most important forward step in the direction of broader trade relations the New World has made since Commodore Perry sailed on his memorable mission to Japan, and brought that profoundly interesting country into closer relations with all mankind.

Few of us to-night, perhaps, comprehend the scope of this enterprise and know how far-reaching may be its results, founded, as it is, upon the active good will of two friendly nations. The people of Venezuela have, I am sure, no small degree of pride in the history and achievements of the people of the United States; and it will, I think, be a pleasing thought to them to know that by their courtesy, generosity, and intelligent cooperation they have notably contributed to the industrial development of a nation so eminently friendly to them as it is the pride and pleasure of the United States to be.

GERMAN SHOWROOMS IN THE EAST.

A leading article in a local official organ, while acknowledging the rapid rise of German trade with the Orient, points out the possibilities of further increase. Among the methods commended, the opening of sample rooms is referred to as most likely to give the largest returns for the smallest expenditure of money and men. To exhibit goods in Bombay and Calcutta, Peking, Shanghai, and Hongkong, in Yokohama and Tokyo, in Valparaiso and Santiago, in Buenos Ayres and Rio de Janeiro for one year is worth a century of circulars by mail. Nothing is so eloquent and instructive as direct contact with the objects offered for sale, nor is any nation above this need. "In Calcutta," says a correspondent, "60 rupees ($12) will easily cover the expense of an exhibit for each manufacturer." Of course, this is an average estimate, the cost depending on the space occupied, the character of the exhibit, etc. But no expense can exceed the advantages bound to accrue. The Japanese consul in Bombay is urging his people to put forth every effort along these lines. Since the return of the Lyons commission, France is organizing syndicates to extend trade, which send out and maintain one or more agents to show samples, obtain orders, and keep in touch with the trade.

Of course, it is best for firms of kindred character to combine; for instance, a varnish house, a white-lead manufacturer, an oil refinery, etc., could easily combine and keep several men in China, India, or any country of the East. These agents are told to study the tastes, needs, and even the prejudices of the people among whom they travel. They should be able to promise goods constructed or modified as desired. Merchants and manufacturers should send out business men—selling agents, not missionaries and schoolmasters. It takes a long time for a people to unlearn its customs. The French consul in Fuchau has figured out a very small sum as sufficient for the maintenance of a good commercial agent for that part of China represented by Shanghai and Hongkong. Ten firms can do it, each paying a proportionate part of the total sum. He says that the amount is insignificant compared with what each house would have to pay to maintain an agency in either city. He says, further, that for France to have independent trade with China she must maintain a line of steamers with Fuchau, Hongkong, Shanghai, and other ports. With such a line, France can obtain concessions similar to those granted Germany and England. One of the drawbacks to French progress in China is the fact that her goods have to be transferred from French to English ships at Hongkong, for further transportation. Increased cost, delay, quarrels over damages, etc., are the unavoidable incidents of such a system.

The East has more than half the human race to clothe and feed, and no nation has opportunities like our own. With lines of steamers from San Francisco, Seattle, and Portland, with a canal via Nicaragua or Panama, and communication from the gulf and Atlantic cities, we must participate as no other power can in the commercial splendor promised for the coming century. If coarse cottons can be spun and woven in the South, if Alabama can make iron rails as cheap or cheaper than England, if Europe buys our machines, locomotives, tools, agricultural implements, etc., we must carry these products to the East.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *March 16, 1898.*

INCREASE OF GERMANY'S EASTERN TRADE.

This Empire neglects nothing that aids her foreign commerce. Her interest in home industries is equaled by her efforts for trade in far-off lands. A year ago a commission of experts went to the Orient to study its needs and to gather information. Subsidies have been voted to steamship companies, with a view to the extension of the Empire's exports. In ten years Germany has increased the number of her large establishments in China from 56 to 92, and in Japan from 38 to 57. This indicates a healthy growth. The work done twenty years ago is now bearing fruit. The goods sent from

Germany to China went up from $5,871,500 to $10,769,500 in the years between 1889 and 1896, an increase of 86.7 per cent; to Japan the increase was from $4,426,800 to $8,490,000, or 92.2 per cent. The imports are relatively larger; from $2,023,000 to $4,760,000, or 136.5 per cent, from China, and from $833,000 to $2,142,000, or 162.7 per cent, from Japan. The Empire derives much encouragement from the fact that its increase in Eastern trade is relatively greater than that of any other country. This is urged only to encourage greater efforts, for in articles and reports chronicling this fact German merchants and manufacturers are told that England's trade with China is six times, and with Japan three and one-half times, larger than that of Germany. Of China's and Japan's total imports, Germany furnishes, as far as the facts can be found out, about one-tenth. Of China's exports, Germany receives about one-sixth as much as goes to England, and her share of China's total exports is about one-thirteenth. Of Japan's exports, Germany takes one-third as much as England and one thirty-eighth of the total. Govermental aid, encouragement from chambers of commerce, boards of trade, commissions, etc., are given to incite German merchants and manufacturers to emulate those of England.

Increase in shipping in the Eastern trade is another encouraging item—from 84,000 registered tons in 1886 to 219,392 in 1895. To these thousands must be added the rapidly increasing coast service in China.

Chemnitz is looking forward to a time when China will wear the hose and underwear of western people. Germany has made up her mind to carry her own products in her own ships, built in her own yards. Her example might well be followed by the United States.

J. C. MONAGHAN,
CHEMNITZ, *March 13, 1898.* *Consul.*

GERMAN COLONIES IN AFRICA.

The total value of the trade between the German Empire and the African colonies amounted to $2,837,000 in 1896, the exports from Germany exceeding the imports, and the latter being valued at $534,500.

In 1896 the white population of the colonies consisted of about 3,580 people, 1,350 of whom were officials and soldiers and 1,778 non-Germans. The total force employed by the German authorities was 1,120 white officers and men and 2,000 colored troops, besides the local police forces. The last two years have not been good. The last season in Togoland was extremely unhealthy, and the preceding season unfavorable to the growth of crops; so there has been a decrease in exports. Southwest Africa suffered last year from a native rebellion, while during this year the rinderpest prevailed.

East Africa has hardly recovered from its plague of locusts and the consequent famine. But, in spite of these drawbacks, considerable progress has been made. German capital has shown confidence in the possibilities of industry in East Africa, and large sums have been invested.

The labor question seems to be settled in a fair way, owing to the discovery of certain native tribes with an aptitude for labor. The land question has been put on a satisfactory footing, and the legal conditions of ownership are clearly laid down. A law has been passed which enables Germans resident in southwest Africa to serve their time in the colonial troops, thus giving a great impetus to the formation of these forces. Some progress has been made in the surveys on the East African Railway, and the route may now be considered as settled; but no money is yet forthcoming, and the present Usambara line, 30 miles long, has come to a standstill for want of funds. The discovery of gold is announced from East Africa, as well as a rich find of coal within easy reach of Lake Nyassa, which will be of great use in connection with the steamship service. In spite of unfavorable seasons, the export of coffee from Togoland has increased from 850 to 5,500 kilograms (1,800 to 12,000 pounds), and there is a good chance that the plantations now being established in the Kameroons will be successful.

An arrangement has been arrived at with France, which, if it secures good relations with Dahomey and a fixed boundary, must prove a stimulus to the prosperity of the protectorate.

Southwest Africa, though suffering from drought and rinderpest, as well as insufficiency of harbors, has already a white population of over 2,000. The guano deposits have yielded well. Farms are being taken up in the interior, and measures are about to be adopted to improve the water supply by the construction of dams. The suppression of the outbreak of the Khanas Hottentots and the Hereros will, it is hoped, secure a lasting peace.

MAX BOUCHSEIN,
Consul.

BARMEN, *March 11, 1898.*

GERMAN EMIGRATION LAWS.

I inclose herewith a copy and literal translation of the new emigration law of the German Empire, passed June 9, 1897, which goes into effect on April 1, 1898, feeling sure it will be of interest to the immigration bureaus of the Western States and to many Western railroad companies seeking settlers along their lines, if not to the public in general..

EDWARD H. OZMUN,
Consul.

STUTTGART, *March 25, 1898.*

EMIGRATION LAW OF JUNE 9, 1897.

I.—Contractors.

SECTION 1. Permission is required to forward emigrants.

SEC. 2. Giving or refusing this permission belongs to the Chancellor of the Empire with the consent of the Bundesrath.

SEC. 3. In general, permission is only to be given to—

(*a*) Citizens of, and in business in, the German Empire;

(*b*) Mercantile associations, joint-stock companies, etc., whose headquarters are in the Empire; and business firms, branch business firms, and stock companies, whose responsible stockholders are citizens of the Empire.

SEC. 4. To foreigners and citizens of the Empire who are established in business outside of the German Empire, permission can only be given—

(*a*) If they empower a German citizen residing in the Empire to represent them judicially in the matter of forwarding emigrants and in dealing with the authorities;

(*b*) If they subject themselves to German law and courts in case of controversies arising from the acceptance and forwarding of emigrants.

SEC. 5. Before permission is given, the applicant has to deposit securities for at least 50,000 marks ($11,900), and if intending to undertake a transoceanic forwarding business he must prove that he is a shipowner.

SEC. 6. Permission is to be given only for particular countries, and portions of such, or particular places, and in case of transoceanic forwarding only for particular ports of entry.

SEC. 7. In case permission is requested by German societies whose object it is to procure settlers for lands acquired by them in transoceanic countries, the Chancellor of the Empire is not bound by the conditions of section 5; for particular reasons, however, exceptions can be made.

SEC. 8. Permission entitles the grantee to do business throughout the German Empire, with the following restrictions: Outside of the communality of his place of business and that of his branch offices, he has—as far as concerns more than giving information to inquiries and the publication of conditions and forwarding opportunities—to avail himself of the assistance of agents as provided in section 11.

SEC. 9. The grantee can have substitutes to transact his business. The appointment of such is necessary for the establishment of branch offices. After the death of a grantee, and in case of guardianship, the carrying on of the business can only be continued by the substitute for six months. The appointment of a substitute has to be approved by the Chancellor of the Empire.

SEC. 10. The permission given to grantees can, with the consent of the Bundesrath, be revoked at any time by the Chancellor. The permission of the appointment of a substitute can be revoked by the Chancellor at any time.

II.—Agencies.

SEC. 11. Whoever desires to assist in the manner described in section 1 by preparing and contracting the forwarding of emigrants requires permission therefor.

SEC. 12. This permission is given by high administrative authority.

SEC. 13. Permission can only be granted to citizens of the Empire who reside or do business within the district of this high administrative authority (section 12). This permission can not be granted even under compliance with the above requirements—

(*a*) If facts are known which prove the unreliability of the applicant;

(*b*) If permission has already been granted (section 15) to a number of persons considered sufficient for the proportion of the district by the authorities thereof.

SEC. 14. Before permission is granted, the applicant has to give security for at least 1,500 marks ($357).

SEC. 15. Permission to do business in the district of the authority granting the same, if the same is not limited to a part thereof only, can be given; with the consent of this authority, the extension of the business into neighboring districts can be granted to the agent by the authorities of such districts.

SEC. 16. Agents can not transact business of the kind mentioned in section 11 for persons other than those mentioned in the instrument of permission, or for their own account.

SEC. 17. Agents can not carry on business in branch offices by substitutes or in traveling about.

SEC. 18. Permission granted to agents can at any time be limited or revoked. Permission must be revoked—

(*a*) If the requirements of section 13 are not complied with;

(*b*) When facts exist which prove the unreliability of the agents in regard to business transactions;

(*c*) If securities, in part or wholly, have been applied to cover claims, and are not replaced within four weeks after being called for.

SEC. 19. Complaint against the ordinances of the authorities based on sections 11, 15, and 18 can be entered at the supervising authority within two weeks.

III.—Ordinances for grantees and their agents.

SEC. 20. The securities deposited by grantees and their agents serve for all liabilities, fines, and costs arising from their business transactions with emigrants and with the authorities.

SEC. 21. The Bundesrath issues the necessary regulations about the management of the business of principals and agents, particularly—

(*a*) About the books and registers to be kept, statistics and other records, as well as the blank forms to be used;

(*b*) About the manner of giving security and the conditions which are to be entered in the bond concerning the liability and supplementing and restoring the securities.

IV.—Forwarding emigrants.

SEC. 22. The grantee is permitted to forward emigrants only on the basis of a previously executed written contract. The emigrants can not be placed under obligation to pay or refund the whole or part of the passage money, or to refund or work out any advances made to them, after their arrival at their place of destination; neither can they be restricted in the selection of their occupations or places of residence in the foreign land.

SEC. 23. The forwarding and making contracts to forward—

(*a*) Of persons owing military duty of the age beginning with 17 and ending with 25 years, before they have procured a certificate of discharge (section 14 of the law about acquiring and losing German citizenship of June 1, 1870) or a certificate of the commission for substitutes, showing that their military duty does not interfere with their emigration;

(*b*) Of persons whose arrest has been ordered by any court or police authority;

(*c*) Of German citizens for whom the passage money has been paid wholly or in part, or who have received advances from foreign governments or colonial societies or similar agents—

are prohibited. (Exceptions to this can be granted by the Reichskanzler.)

SEC. 24. Emigrants who do not possess the necessary certificates mentioned in section 23, or who belong to the class of persons mentioned in *b* and *c* of the same section, may be prosecuted by the police authorities. The police authorities in the seaports are authorized to prosecute those who ship persons whose forwarding is prohibited by this law.

V.—Regulations for emigration to trans-European countries.

SEC. 25. Contracts for forwarding emigrants must include transportation and board to the foreign port of landing. The same is to be extended to the transportation and boarding from the port of landing until the place of destination, as required by the granting of permission (section 1). If the emigrants take passage in a foreign shipping port (not German), or if a change of ships has to take place, these must be mentioned in the contract.

SEC. 26. The sale of passage tickets to emigrants from a transoceanic place is forbidden. This prohibition does not apply, however, to contracts under which the grantee agrees to forward the emigrants from transoceanic ports.

SEC. 27. The contractor is obliged to board and lodge the emigrants at the appointed place of forwarding or shipping without cost, if the delay of departure is not caused by the emigrants.

SEC. 28. If the delay lasts longer than a week, the emigrant has—without prejudicing his claim for damages—the right to withdraw from the contract and to demand the restitution of his passage money.

SEC. 29. The restitution of the passage money can be demanded also if the emigrant or any member of his family accompanying him should die before the beginning of the sea voyage, or if he can prove that by sickness or other circumstances beyond his control he is prevented from undertaking the sea voyage. The same refers to cases concerning the restitution of the corresponding part of the passage money where, according to section 26, the forwarding from a transoceanic port of landing is prevented. One-half of the passage money can be demanded if the emigrant withdraws from the contract for other reasons before the voyage begins.

SEC. 30. Should the ship by accident or any other cause be prevented from continuing the voyage, or by such causes is delayed on the voyage, the contractor (section 1) is bound to furnish the emigrants sufficient lodging and board, and to forward them and their baggage to the place of destination as soon as possible. This ordinance applies also to the forwarding from the transoceanic port of landing (section 26).

SEC. 31. Agreements contrary to the conditions of sections 27–30 have no legal force.

SEC. 32. The contractor can be compelled to insure his obligations arising from the sections 27–30, in a sum exceeding by one-half the amount of the passage money, or to deposit an amount sufficient to cover this sum.

SEC. 33. Contractors are responsible for the seaworthiness of the ships by which the emigrants are conveyed, as well as for their proper provisioning, as prescribed by law. These obligations also rest upon the commanders of the ships.

SEC. 34. Every emigrant ship, before entering upon its voyage, is subject to inspection as to its seaworthiness, outfitting arrangement, and supplies of provisions. This examination is conducted by official inspectors appointed by the respective governments.

SEC. 35. Before leaving port, the emigrants and ship's crew must be examined as to their health by a physician appointed by the emigration authorities (section 40).

SEC. 36. The Bundesrath creates ordinances covering the condition, arrangement, outfit, and supplying with provisions of emigrant ships, the official inspection and control of the same, and the sanitary inspection of the passengers and crews before embarkation, the exclusion of sick people, the management of embarkation, and the protection of emigrants in regard to health and morality. The ordinances promulgated by the Bundesrath are to be published in the law paper of the Empire, and to be submitted to the Reichstag at its next sitting.

SEC. 37. As emigrant ships, in the sense of the law, are to be considered all vessels sailing to trans-European seaports and carrying—not considering the cabin passengers—at least twenty-five passengers.

VI.—Authorities of emigration.

SEC. 38. For the assistance of the Reichskanzler in executing the duties and rights pertaining to his office in regard to emigration affairs, a council of competent persons, consisting of a president and at least fourteen members, is created. The president is appointed by the Emperor, and the members are elected by the Bundesrath. Every two years a new election of members takes place. In general, the organization of the council is regulated by the Bundesrath, and its actions by a self-made order of business.

SEC. 39. This council must be consulted before permission is granted for enterprises the object of which is the settlement of particular parts of transoceanic countries, as well as in limiting or revoking the privileges of a contractor. Besides this, the Reichskanzler may bring before this council, for consideration, proper and important questions about emigration, and motions can be brought by the council before the Reichskanzler.

SEC. 40. For the supervision of emigration and the proper execution of the ordinances thereof, emigration authorities are to be appointed by the respective governments in seaports where contractors have received permission to transact business.

SEC. 41. In the seaport, the Reichskanzler causes the supervision of emigration by commissioners appointed by himself. These commissioners are empowered to assist in the inspections provided for in section 34; also, to undertake independent inspection of emigrant ships. They have to call the attention of the authorities to discovered discrepancies and offenses, and insist upon their being remedied. The commanders of emigrant ships are compelled to give the commissioners, when asked for, a truthful statement about all the circumstances connected with the ship and the voyage, and to permit them at any time to enter the ship's rooms and examine the ship's papers. In foreign countries, the duties of the commissioners, for the protection of the emigrants, are executed by the authorities of the Empire, to whom, if necessary, assistant commissioners can be attached.

VII.—Forwarding from ports outside of Germany.

SEC. 42. By order of the Emperor, the Bundesrath concurring, for the regulation of forwarding emigrants and passengers in German vessels sailing from other than German ports, ordinances of the kind mentioned in section 36 can be issued.

VIII.—Fines.

SEC. 43. Contractors who contravene the ordinances of sections 8, 22, 23, 25, 32, and 33, or the conditions to which the management of their business is subjected by the competent authorities, are liable to a fine of 150 to 6,000 marks ($35.70 to $1,428) or imprisonment up to six months. If the contraventions have been committed by an agent (section 9), the latter is fined; the contractor is also fined if the contravention has been committed with his knowledge, or if he has failed in the necessary care and supervision of his agent as far as it was possible under the circumstances. The same fine is imposed upon commanders of ships who fail in the duties under sections 33 and 41, or who contravene the ordinances issued under section 36, whether the contravention may have been committed in the inland or in foreign countries.

SEC. 44. Agents (section 44) who contravene the ordinances of sections 15, 16, 17, 22, 23, and 25, covering the regulations issued for the management of their business by the competent authorities, are subjected to a fine of from 30 to 3,000 marks ($7.14 to $714) or of imprisonment up to three months.

SEC. 45. Anyone forwarding emigrants without permission under sections 1 and 11, or assisting in such business, is fined with imprisonment up to one year and in the penal sum of 6,000 marks ($1,428), or with either of these fines. The same fine is imposed upon those who make it a business to induce emigration.

SEC. 46. Whoever contravenes the ordinance of section 26 is punished with a fine up to 100 marks ($23.80), or with imprisonment.

SEC. 47. Contravening the ordinances of section 42 is punished with a fine of from 150 to 6,000 marks ($35.70 to $1,428), or with imprisonment up to six months.

SEC. 48. Whoever induces a female to emigrate with a purpose of prostitution, by concealing this purpose, is subject to imprisonment up to five years. Besides the jail punishment, the loss of civil honor and rights is pronounced, at the same time a fine of 150 to 6,000 marks ($35.70 to $1,428). Subjection to police supervision can be imposed. The same punishment is imposed where persons induce female emigration for purposes of prostitution, even where the purposes are made known to such females. Under mitigating circumstances, the punishment may be reduced to not less than three months' imprisonment and a fine of 150 to 6,000 marks ($35.70 to $1,428).

Final ordinances.

SEC. 49. The central authority of the Bundesrath will designate the authorities meant by supervising, administrative, and police authorities.

SEC. 50. This law will go into force April 1, 1898, and at the same time all ordinances issued under various laws of states for the permission of forwarding emigrants or assisting in same.

EMIGRATION FROM IRELAND.

It is only since 1851 that statistical returns of emigration from the United Kingdom have been kept by the British Government. Previous to that time most of the emigration was by sailing ships, and the immigration was so small as to be of no consequence. Before the famine of 1846–47, the emigrant was obliged to provide food for the voyage, often had long distances to travel before reaching the ship, and generally performed the journey on foot, as there were no railways or other public conveyance. It required much time to reach America then, and so great were the discomforts connected with the voyage that few of the emigrants ever even thought of returning. Now, with conveniences for reaching the port and crossing the Atlantic, the journey seems more like a holiday trip, and the consequence is that the emigrant, male and female, returns so frequently that immigration from the United States is fully half as great as the emigration to that country; and helps materially to keep up the outflow that has been going on for so many years. The United States is the other home of the emigrant, and he loves it.

While from England and Scotland, in 1896, only about half the emigration was to the United States, 97 per cent of that from Ireland was to that country.

Year by year, the number of emigrants has been decreasing, until, from a total of 190,000 in the year 1852—the largest return for any one year—there were only 33,000 in 1897. Of this number about half were returning immigrants who had come over as visitors from the United States. Of the 33,000 from all Irish ports in 1897, about 23,000 sailed from Queenstown, where they find the fastest and most comfortable ships, with direct service to New York, Boston, or Philadelphia.

During 1897, over 18,000 Irish emigrants were landed at New York; and I find from a statistical report that less than 5 per cent of these were unable to read and write. The system of national education carried on for many years in Ireland is to be credited with this good showing, and has placed the Irish in a position, in this as in other particulars, to compare favorably with emigrants from other European countries.

DANIEL SWINEY,
Consul.

QUEENSTOWN, *March 14, 1898.*

DANISH-AMERICAN STEAMSHIP SERVICE.

The United Steamship Company, Limited, of Copenhagen, has for a short time had steamers running in the winter season from Copenhagen to New Orleans, and now to Newport News and Norfolk. The company is pleased with the result, and it is intended to place more steamers on the route and to have more frequent departures from both sides. The company's fleet on this route comprises the following steamships:

	Registered tons.
Kentucky	4, 700
Arkansas	4, 700
Louisiana	4, 600
Alexandra	3, 500
Nicolai II	3, 500
Xenia	3, 500
Total	24, 500

The steamers have been dispatched pretty regularly once a month. The agents are Chas. F. Orthwein & Sons, New Orleans, and the United States Shipping Company, Newport News and Norfolk. The most important articles carried from New Orleans to Copenhagen are corn, wheat, cotton-seed cakes, lumber, flour, iron, cotton, machinery, bicycles, agricultural implements, etc. In 1897 the quantity was about 46,000 tons.

The route—Copenhagen to Newport News and Norfolk—was opened in December, 1897. The steamers take freight to Denmark, Norway and Sweden, Finland, Russia, and the Baltic.

The export from Copenhagen to New Orleans, etc., is so far insignificant, but efforts are being made to develop it. Cement, iron, rags, and matches have been exported in small quantities.

JULES BLOM,
Vice and Deputy Consul.

COPENHAGEN, *March 26, 1898.*

AMERICAN RAILWAY MATERIALS IN RUSSIA.

Ambassador Hitchcock sends the following from St. Petersburg, dated April 9, 1898:

I inclose copy of a note addressed by me to the managing director of the Manchurian Railway on April 4 last, and translation of his reply thereto, from which it appears that an American company is to receive a contract for 36,000 tons of steel rails and 4,320 tons of fish plates for use in the construction of that railway.

EMBASSY OF THE UNITED STATES,
St. Petersburg, April 4, 1898.

MR. DIRECTOR: Learning that a large contract for steel rails for the Manchurian Railway is about to be awarded, and upon information that bids, accompanied by the necessary powers of attorney, are on their way from the United States, I venture to request, if it is found by the competent authorities compatible with the interests of the railway company and of the Imperial Government, that another week or ten days be allowed, before the contract is finally awarded, for presentation of the American bids.

Trusting that the officials of the Mauchurian Railway Company may find it practicable to permit my countrymen to submit proposals for this contract, I beg of you to accept, Mr. Director, the assurance of my distinguished consideration.

ETHAN A. HITCHCOCK.

His Excellency Mr. EMILE K. ZIEGLER,
Directing Manager, etc., Eastern Chinese Railway Company.

[Translation.]

EASTERN CHINESE RAILWAY COMPANY,
St. Petersburg, March 26 (April 7), 1898.

Mr. AMBASSADOR: Our company has resolved to order from the American Iron Works (Pennsylvania and Maryland companies) 2,000,000 poods of rails and 240,000 poods of fish plates.

This decision being in accordance with the desire you had the goodness to express in your letter of March 23 (April 4), I hasten to bring it to the knowledge of Your Excellency and beg you to accept, Mr. Ambassador, the assurance of my highest consideration.

E. ZIEGLER,
Managing Director.

Under date of April 7, 1898, Ambassador Hitchcock writes from St. Petersburg that he has just received the following telegram:

First Russian standard locomotive built in Russia solely with American machinery and under American superintendence made its successful trial trip to-day.

DIXON,
Chief Engineer Sormovo Works.

The Ambassador adds:

Mr. Dixon, the chief engineer of the locomotive works, who signs the telegram, is a Philadelphian.

Believing that this pleasing intelligence can not fail to be of interest to our countrymen, I take much satisfaction in communicating it.

PIRÆUS-LARISSA RAILWAY.

I inclose herewith a few notes on the Piræus–Larissa Railway, in the completion of which the Greek Government is desirous of interesting foreign capitalists.

PIRÆUS TO THEBÆ.

The line from Piræus to the twenty-eighth kilometer (eighteenth mile) is opened, and the rails laid; there remain some earthworks to be executed and the laying of a bridge on the junction of the Attica line. The line from the twenty-eighth to the forty-fifth kilometer is half finished. The most important work still to be done is the completion of the trench and sanitary works at Boyati (twenty-first mile), the completion of rock cuts—one at Mazi (twenty-eighth mile) and another at the twenty-second mile—a tunnel 100 meters (328 feet) in length, and many small bridges.

The section from Mazi to Cacosalessi (twenty-ninth to thirty-seventh mile) is in a very unfinished condition, especially in regard to earthwork. The land generally is of a stony nature.

The section from Cacosalessi to Schismatari is almost finished. A few half-finished trenches remain to be completed.

The section from Schismatari to Thebæ (17.4 miles) is ready for use.

With the exception of 2,000 feet along the seacoast, and some rock cuttings, the branch line to Chalcis is nearly opened up to the tenth mile.

To complete the roadway from Piræus to Thebæ, including the branch to Chalcis, it will be necessary to excavate 480,000 cubic meters (16,951,680 cubic feet) of earth, to construct about 60,000 cubic meters (2,118,960 cubic feet) of seacoast foundation, to adjust slopes, and to execute other works for the purpose of improving sanitary conditions. About 3,400 cubic meters (120,074 cubic feet) of masonry work of various kinds, the erection of 19 tons and the purchase and erection of 27 tons more of metallic platforms, and the construction of a tunnel 100 meters (328 feet) in length will also have to be accomplished.

As before stated, a road 35 miles in length has been railed, but will need some repairs, especially from Piræus up to the twenty-eighth kilometer (eighteenth mile), and there remain 41 miles to be railed.

The building of stations, stands, watchhouses, and the iron workshop at Piræus remain to be executed; also the completion of the grounds of the station, with the necessary permanent material, such as watering machines, winches, weighbridges, signal stations, etc.

In order to work the line, it is necessary to complete the supply of locomotives, carriages, and wagons.

The following is the estimated cost for the completion of the line from Thebæ, including the branch to Chalcis:

Nature of expenses.	Amount.	
	Drachmas.	
General expenses	400,000	$70,000
Earthworks	1,650,000	288,750
Sectional works	390,000	68,250
Road	800,000	140,000
Stations, etc	1,517,000	265,475
Ironworks at Piræus	300,000	52,500
Rolling stock	*1,690,000	*326,170
Loss from exchange	1,267,500	221,812
Unforeseen expenses	485,500	84,875
Total	8,500,000	1,517,832

* Gold; payable abroad. All other amounts are reduced at the rate of 17½ cents per drachma.

THEBÆ TO LAMIA.

The section from Thebæ to Levadia, 39 kilometers (24 miles), is finished; some earthwork and the purchase and location of a few tons of metallic platform remain to be completed.

On the section from Levadia to Dadi, 42 kilometers (26 miles), 109,000 cubic meters (3,849,444 cubic feet) of earth remain to be excavated, 2,950 cubic meters (139,498 cubic feet) to be constructed, besides the purchase and locating of 130 tons of metallic platform.

On the section from Dadi to Lianocladi, 41 kilometers (25½ miles), most of the work is completed up to the fourteenth kilometer (ninth mile), and there only remain the excavation of 38,000 cubic meters (1,342,008 cubic feet) of earth, the construction of 164 cubic meters (5,791 cubic feet) of masonry, and the purchase and locating of 65 tons of metallic platform. One-half the earthwork has been finished from the thirty-fifth kilometer (twenty-second mile) to the sixty-sixth kilometer (forty-first mile); there remain for execution the digging out of 22,300 cubic meters (787,546 cubic feet) of earth; the construction of the large road bridges at Bralo and Assopo, with their metallic platforms of about 800 tons weight; the construction of 21,000 cubic meters (741,636 cubic feet) of masonry; the finishing of the long tunnel at Bralo, and the completion of sundry small tunnels 1,126 meters (3,694 feet) long in all. There also remain the purchase and location of 580 tons of metallic platforms of some small bridges and road bridges. With the exception of digging out 17,000 cubic meters (600,372 cubic feet) of earth, the line from the thirty-fifth to forty-first kilometer (twenty-first to twenty-fifth mile) is finished.

On the branch to Santa Marina, 19.7 kilometers (12.2 miles) in length, a few embankments of about 17,000 cubic meters (600,372 cubic feet) have still to be completed. With regard to stations, stands, and watchhouses, only the walls of two stations and of two watchhouses are built. The large iron landing platform has also been finished at Santa Marina.

The following is an estimate of the expenditures required for the completion of the line from Piræus to Lamia, with branches to Chalcis and Santa Marina:

Nature of expenditures.	Amount.	
	Drachmas.	
General expenses	1,000,000	$175,000
Intrastructure:		
Earthwork	4,650,000	813,750
Bridges, masonry, tunnels, etc	8,100,000	1,417,500
Superstructure:		
Road	2,280,000	399,000
Stations	2,600,000	455,000
Piræus iron workshop	300,000	52,500
Rolling stock	*5,295,000	*1,021,935
Loss from exchange	3,971,250	694,969
Incidental expenses	1,303,750	228,156
Total	29,500,000	5,257,810

* Gold; payable abroad. All other amounts are reduced at the rate of 17½ cents per drachma.

The following is an estimate of the general expenditures for the completion of the line from Piræus to Larissa, with branches to Chalcis and Santa Marina:

Nature of expenditures.	Amount.	
	Drachmas.	
General expenses	1,500,000	$264,500
Intrastructure:		
Earthwork	11,200,000	1,960,000
Bridges, tunnel, masonry, etc	17,800,000	3,115,000
Superstructure:		
Road	3,550,000	621,250
Stations	3,300,000	577,500
Piræus and Larissa iron workshops	500,000	87,500
Rolling stock	*9,435,000	*1,820,955
Loss by exchange	3,546,375	620,615
Incidental expenses	1,668,625	292,009
Total	52,500,000	9,359,279

* Gold; payable abroad. All other items reduced at the rate of 17½ cents per drachmas.

The value of works executed and of existing material is about 2,200,000 francs ($385,000).

GEORGE HORTON,
Consul.

ATHENS, *March 12, 1898.*

UNITED STATES GOODS IN AIX LA CHAPELLE.

I transmit the following report on the present opportunity for placing American goods in Aix la Chapelle, Germany:

This report is based on the retail prices and the quality of American goods, with which I am familiar, in competition with foreign goods now in this market. Retail prices never vary here; when a price has been marked on goods it is seldom changed. Among articles that I have personally examined, and in which the difference in price and quality, compared with American goods, is very marked, may be mentioned cooking stoves, ranges, small stoves for heating single rooms, furniture of medium and cheap grades of oak or soft wood, boots, shoes, and rubber goods.

The cooking stove in the market here is well made, but not practical. A stove sufficiently large for a family of four persons (size of oven, 8 by 12 inches) costs $23.80, and one of the same size covered on all sides with tiles, and having a back shelf, costs $42.84; and as the size increases so does the price. As to stoves for heating purposes, one of cast iron, 40 inches in height and 12 inches in circumference, costs from $12 to $25. These stoves are dirty, dusty, and undesirable. The native stoves, which are mostly used, burn a cheap grade of coal and are nothing but a heavy sheet-iron fire box. The fire must be regulated every twenty minutes, and, if not properly attended, a bucket of coal will be burned and the fire will be out in half an hour. Another stove is made of cement or composition, and is in reality nothing more than a flue about 2 feet in height and 14 by 10 inches square, costing between $23.80 and $35. Stoves here are elaborately ornamented in brass, nickel, or bronze, and, as a piece of furniture, appear very well. A word may be in place concerning the shipment of ornaments that belong to stoves: All ornaments containing metal other than cast iron should be separately packed, for under the German tariff they are classified in order to collect the highest duty possible.

The customs system is ingenious; for instance, a customs official was asked: "What is the duty on a suit of clothes from the United States?" The answer was: "The duty is about $2, or at the rate of 300 marks per 100 kilograms ($71 per 220 pounds); but if the clothes are lined with silk (even if only the sleeves are so lined) the duty is $9, or at the rate of 1,200 marks ($285) per 100 kilograms.

The coal used here is semibituminous, and is mined in the vicinity; it burns readily, gas and soot not being abundant as in the American semibituminous. The large quantity of coal consumed is due to the character of the grates; there seems to have been no improvement in them for ages.

Furniture must be dealt with in a general way, as it is impossible to cover the entire field. A single bed in oak or walnut, plain veneer, with a cheap spring, costs $20 to $25. I have just paid 200 marks ($47.60) for a plain veneer, German walnut, double bed. A similar one could be bought in the United States for $6 or $7. All furniture is sold by the piece, except the finest parlor suites, which consist of a small sofa and two chairs.

The duty on furniture not painted is 3 marks per 100 kilograms (71 cents per 220 pounds); on furniture painted, 10 marks ($2.38) per 100 kilograms, and when ornamented much higher. The very cheapest chair costs $1.25, and an ordinary dining-room chair of natural walnut costs between $4 and $6. Furniture prices average 20 to 50 per cent—and in some instances, such as rocking-chairs, 100 per cent—higher than retail prices in the United States.

Shoes are 10 to 20 per cent higher, and the shape and finish do not compare with American goods. In the better qualities the American last would be suitable, but in the cheaper grades the last would have to be broader than the one used in the United States. The duty on shoes of a common grade is 50 marks ($11.90) per 100 kilograms; on the finer grades the duty is 70 marks ($16.66) per 100 kilograms. Boxing, crates, etc., are included in weight for duty.

A word in regard to the manner in which American goods can be placed on the market in Aix la Chapelle. This city is about 250 miles from Bremen, and has a population of 127,000, 20 per cent being wealthy and 30 per cent well to do, with sufficient means to purchase all necessaries and luxuries. The people are not biased, but believe that all things American are practical and desirable. There are several large cities and towns in the vicinity of Aix la Chapelle, connected in business relations with this city.

If an American representative were to come here, open a warehouse, and put these articles on exhibition, the result would be, I am certain, successful. One person could have charge of these three branches of merchandise; it would be a good idea to have one or two good retail salesmen who could speak German, and an expert mechanic from the United States.

Agencies of American manufacturers are established at Hamburg and Berlin, but the distance of these cities from Aix la Chapelle, together with the extra freight and the middleman's profit, make the prices much higher than they would be if the goods were sent direct. For instance, indian-corn meal costs 5 cents per pound in Hamburg; the freight from Hamburg to Aix la Chapelle brings the price up to 6 cents per pound here.

Bicycles (on which the duty is not more than $1), pork products, and California dried and canned fruit are much in demand in this market.

I desire to repeat what all other consuls have reported—that advertisements are useless. Any information desired by an American manufacturer or dealer will be gladly given, but I consider it a useless expenditure of time and money to adopt other methods than the sending of agents with samples. However, catalogues printed in German and illustrated may receive some attention, and if sent they will be distributed with pleasure.

FRANK M. BRUNDAGE,
AIX LA CHAPELLE, *April 7, 1898.* *Consul.*

FURNITURE IN WURTTEMBERG.

Stuttgart is famous all over Germany, Switzerland, and Austria for its furniture, and the largest factories here have branch retail houses in many of the principal cities of the Empire. The best grades are very costly, and some of the product is extremely tasteful and well made.

Those able to afford it have their rooms furnished in distinct styles of different periods, and the effect produced by going into a house where the hall is equipped with the furniture of the Middle Ages, the first salon with the delicate taste of the Louis Quinze or Louis Seize periods, the second salon with Louis Quatorze or Rococco, the living room with Renaissance, the library with Empire; the smoking room with Moorish, Indian, or Turkish furniture; the dining room with old Holland, and the chambers and boudoirs with Chippendale or Sheridan is most pleasing, and gives a distinct character and style to the home. These rooms are furnished from designs made by artists of the manufacturer, who has prepared elaborate drawings in colors, which he submits to his customer. These designs include not only the furniture, but the draperies, wall paper or tapestries, coverings, rugs, and mirrors. It is also quite the custom here, when ordering furniture of a good grade, even though not furnishing an entire suite of rooms, to have either special designs made or to select from a large number of photographs the articles desired, as the manufacturer, who also sells his product at retail, deals in a much better class of goods than the retailer, who only sells the very cheapest grades and keeps a very limited stock on hand, hardly more than enough for samples.

The retailers in Stuttgart (it may be different elsewhere in Germany), on account of the great furniture factories here, usually deal in the cheapest grades, which, I may say in general, are much more costly, clumsy, less practical and tasteful than American-made furniture. It is impossible for one desiring a good class of furniture to go into a shop and find at once what he wants, order it, and have it at his house by the time he arrives, as in the United States. He must patiently examine a stock of photographs—which, by the way, is a most unsatisfactory manner of purchasing—and then wait while the easy-going manufacturer, whose employees do nearly all the work by hand, takes his time to make the furniture. He then has a good bill to pay, for this kind of furniture, except in the French styles and the rich Renaissance carvings, is probably 50 per cent more costly than in America; and the discovery is made that some articles, like some people, look better in photographs than to the naked eye. But, in general, I will do the best manufacturers here the justice to say that they are honest and conscientious, taking pride in their work, and in many instances producing well-made and handsome goods. But there seems to be very little furniture of a middle grade. A plain oak extension dining table, seating ten people, costs at least $25, and one can hardly be found quite suitable for ordinary uses for less than $30 or $35. It is the same with dining chairs, which, in oak with plain leather seat and back, cost $5. This furniture is unpolished, and no "filler" is used in the finishing, which shows the rough grain of the wood. Highly polished oak and walnut furniture is unknown here; and cherry, Michigan birch, and maple furniture I have never seen. There is a kind of satinwood, very costly and of fine appearance, which is used to a limited extent; but mahogany, oak, and walnut are the principal woods.

The furniture imported here is for the most part in special pieces of French manufacture for the drawing-room, ladies' writing desks, and the like. They are frequently in the Louis Seize style, are costly, handsomely inlaid, usually of the finest rosewood or mahogany, or gilded in the styles of the Bourbon period. A lady's writing desk, for example, costs $55; a small stand, the top of which is about 6 inches square, with three small drawers, sells for $45; other pieces of more importance are proportionately high. The sale of these goods is necessarily limited. There is a class of American-made furniture which looks nearly as well, and which, as it is far cheaper, would readily take the place of these articles. There is also a sale to some extent of the richly carved furniture of the Renaissance period, copied from famous pieces in Venetian and Roman palaces; these are carved in Italy. I have seen one set of East Indian furniture, consisting of one sofa, one armchair, three unarmed chairs, one round table (revolving top), one writing desk and pedestal, beautifully carved in open work in the black Indian wood, for

$450; which is doubtless much cheaper than it could be purchased in the United States. A handsome pearl-inlaid Moorish set of furniture of not so many pieces, upholstered in white decorated leather, is offered at about the same price.

English brass bedsteads are sold here at prices at least 50 per cent higher than in the United States. A very good business could be done at once in the moderate-priced brass bedsteads of American make. Green stained furniture of the Queen Anne and other periods, of English make, is also beginning to find favor here and sells at high prices. I have seen an imitation Chippendale armchair in mahogany at $40, and a leather easy chair at $50. The cheapest dining-room buffets cost from $30 to $40. The prices of furniture vary so much with the style, finish, quality of wood, and upholstery that it is quite impossible to convey an accurate idea of the retail cost without an illustrated catalogue, which the manufacturers do not prepare; but enough has been said to show that the market for costly furniture here is extensive, and that, as far as the cheaper grades are concerned, there is no possible doubt that the American product could almost entirely drive out local competition. An American cheap chair, shipped in parts and put up here, is sold at a profit.

The proper way to reach the market is for American manufacturers of furniture and house furnishings to combine, open a store, advertise American-made goods, and conduct the business with modern methods. In my opinion, it would prove a great success. The merchants here do not know as well how to cater to the popular taste as Americans do. There are but two department stores here (under one ownership), and, though primitive, they are making such inroads upon the trade of other merchants that the latter are justly alarmed. The proprietor, who has done business in America, and who now has stores in several large cities in Germany, is teaching the people our methods of doing business—such as promptness in delivery, changing goods if not satisfactory, low prices, latest styles, permission to examine the goods without buying—all of which is unknown here among retail dealers.

A large wholesale trade could be established by sending traveling men who understand the language, the business, and the methods of the purchasers. It is simply ridiculous to think that a trade can be built up by sending circulars printed in English, with prices in dollars and cents, and to expect the goods to be paid for before delivery, when the merchant is accustomed to three months' credit.

A feature of the furniture trade, which is peculiar to Wurttemberg, is that twice a year, in May and December, a furniture fair is held in a large hall in Stuttgart, lasting two or three days. Manufacturers of cheap furniture all over the Kingdom bring their goods to the fair and sell mostly to the retail dealers.

OFFICE FURNITURE AND DESKS.

What has been said of furniture in general applies to office furniture as well. The roll-top desk is not often seen. There is no importation of American-made goods. The prices here are relatively much higher than in the United States. A good-sized flat-top oak desk retails from $45 to $50. Office furniture, with the exception of desks, is not known as a distinct class of furniture—that is, offices are furnished as a rule like a living room in a private dwelling.

Good, serviceable office chairs and leather-covered lounges would doubtless find a ready sale. I have seen but few revolving chairs in Stuttgart, and believe they could be sold. Leather is very dear here.

CABINET FILES.

I may say briefly that these are almost unknown. The few that may be found in business offices were doubtless purchased from abroad or made to order from the purchaser's designs. I doubt if a satisfactory trade in this article could be established in the near future, as modern methods of business (as the American people understand that phrase) are in their infancy here. Typewriters and stenographers, for example, are found only in a very few of the largest business houses and law offices.

RUGS AND CARPETS.

Few people buy carpets, except in the very cheapest grades. The floors of the better houses are parquetted in hard wood and covered with rugs. The word "Teppich" means either carpet or rug, so that what is said of one applies to the other.

Those able to afford it buy the handsome Persian and Turkish rugs, which are sold at about the same price as in the United States. Not a few Indian rugs are also sold, but they are, as a rule, less costly. There is little sale for Japanese rugs. The rugs having the greatest sale are made for the most part in Saxony. These are of wool and are durable. I have seen many of them in the United States, where they sell at prices generally, I should judge, a trifle higher than here. These rugs, though usually of patterns not in accord with American taste, are to be found in the best houses, and, in fact, in houses of all people in comfortable circumstances.

The more costly grades naturally have better patterns. The best of these rugs, while they are well made, do not last as long as they should, for the German servant uses a stiff, wiry broom-corn brush to clean them daily, instead of a carpet sweeper as in the United States, and besides gives them a very rough beating once or twice a week.

It is the opinion of some retailers that a more or less extended trade in American carpets, to be sewed together with borders, could be built up here if the prices would allow them to compete with German rugs. It is impossible, without samples of each quality of rug, to give any accurate idea of the prices, and I might mislead the manufacturer.

CURTAINS.

Plush, velvet, cretonne, cheviot, and cloth curtains are made in Germany; silk and cretonne ones in France, and lace ones in Germany, Switzerland, France, and Belgium.

The Germans prefer lace curtains, over which is hung a heavy plush or cheviot curtain in solid colors, with lambrequin trimmed with gold braid and fringed. A good quality of cheviot curtain retails for about $15, without poles or fixtures. These fixtures are much dearer than in the United States, and are not so tasteful. I have seen but one brass pole for sale. Plush curtain stuff, in solid colors, 1½ meters (59 inches) wide, retails for 85 cents a yard.

Cotton wash stuffs for the curtains used in the better houses are much higher than in the United States. For example, the common point d'esprit double-width curtain stuff, which retails in the United States for 40 cents per yard, costs here 4 marks per meter, or about 95 cents per yard; and other cotton wash stuffs are in proportion.

PILLOWS.

Feathers are used here in large quantities, and they are dear. The Germans, high and low, have feather ticks for bedspreads in winter. The poor people also use feather ticks instead of mattresses. All have, in addition, huge feather pillows, two for each person. The beds are all single, and the spreads and other appurtenances are made accordingly. The cheapest feathers cost at retail 75 cents per pound. The same quality sells in the United States, judging from recent advertisements in the New York papers, at about 22 cents per pound.

MATTRESSES.

The cheapest mattress is of cotton and wool; it is hard and uncomfortable.

Excelsior is used; also sea grass, and, of course, horsehair for the better class of trade.

EDWARD H. OZMUN,
Consul.

STUTTGART, *March 17, 1898.*

LEATHER TRADE IN SWITZERLAND.

I transmit a statement concerning the leather trade in Switzerland, compiled at the request of a New York export association. As there is but little leather industry in this consular district, I requested the consul at Zurich, Mr. Lieberknecht, to investigate the subject, and he, together with Vice-Consul Germain, has kindly furnished me with the data requested.

Switzerland consumes annually about 35,000,000 francs' ($6,755,000) worth of leather, of which 75 per cent is imported. Some sole leather is manufactured in the country and is used mostly for making ordinary shoes and harness. Switzerland has about 375 tanneries; none, however, of great importance.

Shoes and boots made in Switzerland are heavy, coarse, and, as a rule, cheap. Factories making shoes for export produce a better article than is ordinarily sold to the Swiss people. Swiss shoes are unshapely and clumsy. Fine boots and shoes, sold in Switzerland, are imported from Germany, France, Austria, Italy, England; some from the United States, and the latter are of a higher grade and price than the Swiss-manufactured article.

Middle splits, or junior splits, union splits, flesh splits, slabs, and shoulder splits are bought by shoe manfacturers and shoemakers.

Penitentiaries in Switzerland manufacture custom shoes to some extent, and use the cheapest material obtainable, turning out foot gear for farmers and the poorer classes of citizens in the cities as the articles are ordered.

Manufacturers, shoemakers, and others handle sole and all classes of finished leather for making shoes, harness, saddles, belting, trunks, etc.; also for binding books.

No consignments of leather, so far as I can learn, are made; dealers and manufacturers purchase their stocks. There are leather fairs held semiannually at Zurich, Aarau, etc., where the principal dealers meet and trade.

The import duties on leather are: Sole, harness, belting splits, etc., 16 francs ($3.08) per 100 kilograms (220 pounds). Other kinds of leather, as head, shoulder, belt or belly (vache lissé), 8 francs ($1.54) per 100 kilograms. On ready-made ordinary shoes the duty is 45 francs ($8.68) per 100 kilometers; fine grades and fancy, 130 francs ($25.09) per 100 kilograms.

There is no particular season for buying, but in spring and autumn the heaviest purchases are made, and at these periods Americans would find it advantageous to make offers. The latest available statistics (1896) show imports of leather and manufactures thereof to have been as follows:

Articles.	Quantity.	Value.	
	Met. cent.	*Francs.*	
Rawhides and skins	15,115	2,428,000	$468,604
Leather, finished and unfinished	30,865	12,971,000	2,503,403
Leather shoes (all leather)	6,070	5,862,000	1,131,366
Shoes, part leather	1,752	844,000	162,892
Total	53,802	22,105,000	4,266,365

In the above the United States participated as follows:

Articles.	Value.	
	Francs.	
Rawhides and skins	14,000	$2,702
Leather, principally sole	2,148,000	414,564
Total	2,162,000	417,266

The imports of leather and manufactures thereof into Switzerland from the United States will show an increase for 1897. The United States ranks third as a furnisher of leather (principally sole leather) for 1896, but the statistics do not show any manufactures of leather imported from that country. The following will show the principal countries furnishing leather and manufactures thereof, in order of importance, with the total value of their imports:

Country.	Value.	
	Francs.	
Germany	11,782,000	$2,263,926
France	3,566,000	688,238
United States	2,162,000	417,266
England	1,520,000	293,360
Belgium	952,000	183,736
Italy	710,000	137,030

Other countries with smaller amounts make up the balance.

WHOLESALE LEATHER DEALERS.

Zurich.—E. Habicht & Sohn, dealers in soles and splits; Moritz Hahn, soles and splits; I. Matter, soles and splits; C. Paris, soles and splits; Schumacher Association, soles and splits; Stutz & Co. saddlery leather.

Berne.—Gottl. Hain, all kinds of leather; Gebr Lücher, soles and uppers; Henri Schalch, saddlery leathers.

Basel.—Imhof & Schäfer, all kinds; Hans Scheeberger & Co., all kinds; Gebr. Winter Co., all kinds; Ed. Baumgärtner, all kinds.

St. Gall.—Dürler & Co., Gottl. Schmid, I. Tobler, John Bapt. Straub.

Coire.—Gebr. Büchli, Anton Lendi.

Aarau.—Hagnaur & Co., Hans Hassler.

Lausanne.—Gottlieb Ammer, C. L. Crausaz, Alfred Wenger, Schiffmann & Weltner.

Neuchatel.—E. Jeanmonod, Theo. Morel, Jac. Joerg.

Chaux de Fonds.—J. Hegi Wèber, Emile Lenzinger, Fritz Messerli.

Geneva.—M. Boissett, Despesse & fils, Ehrsam-Rueff, I. Keck, Edmond Privat, C. Stragiatti, I. Witzigmann.

PRINCIPAL SHOE FACTORIES.

Schuhfabrik Anstaldt Brüttisellen, Zurich, employs 450 hands.

I. F. Ammann & Co., Illnau, Canton Zurich.

W. Bratteler-Stehli, Winterthur, 160 hands.

Hoffmann & Co., Winterthur.

Albert Ruf, Winterthur.

Christ Hofer, Biglen, Canton Bern.

A. Giesiger, Laufen, Canton Bern.

Schuhfabrik Evenda, Evenda-Emmettbühl, Canton Bern.

C. F. Bally Söhne, Schönwerd, Canton Soleure, have about ten factories scattered through Cantons Soleure, Aargau and Thurgau; employ about 4,000 hands; use electric, water, steam, and petroleum power; have sales rooms and offices at London, Montevideo, and Buenos Ayres; manufacture men's, ladies', and children's shoes, principally for export.

Jac. Weil, Basel.

J. Brugjer Hilberg, Basel.

L. Baumgärtner, Alschwil, Canton Basel, 50 hands.

Albert Thommen, Brunigen, Canton Basel, 100 hands.

Gebrüder Henke, Stein-a-M., 100 hands.

F. Dieraurr-Forrer, Obernzwill, Canton St. Gall, 250 hands.

Schuhfabrik, Baden, Canton Aargau, 100 hands.

Hans Zehnder, Kölliken, Canton Aargau.

A. Hühnerwadel & Co., Weltheim, Canton Aargau.

Bolliger & Co., Zoffingen, Canton Aargau.

Brauchli, Steinhauser & Co., Frauenfeld.

I. I. Näzli & Co., Armisweil, Canton Thurgau, 100 hands.

E. S. Weill, Mechanische Schuhfabrik, Gaissberg, Kreuzlingen.

Schuhfabrik, Kreuzlingen, Kreuzlingen.

Joh. Gilg, Marstellen, Canton Thurgau.

H. Kuhns, Marstellen, Canton Thurgau.

I. Chessex & Co., Lausanne.

Jean. Spychiger, Lausanne.

Henry Clavel ainé, Vevey.
A. Zuccarani, Geneva.
F. Monfort, Geneva.
A. Longet, Geneva.
Rolat & Co., Geneva.
Christian Tellenbach, Vaumarcus, Canton Neuchatel.

JAMES T. DUBOIS,
Consul-General.

ST. GALL, *April 1, 1898.*

ADVERTISING METHODS IN SAXONY.

An interesting phase of Saxony's business customs is illustrated in the methods of advertisements most commonly used to exploit the sale of goods, both wholesale and retail. The following means of display advertising can be taken as the most representative now employed.

RETAIL STORES.

The retail stores in Leipsic are largely dependent upon their window display for local advertisement. Apparently, the average retail storekeeper in this vicinity takes a great pride in the display appearance of his show window. In many instances he will yield a portion of his store space to present a window more attractive than his neighbors. A sample of nearly every kind of article he sells is in the window, and the arrangement is made as attractive as possible. Many novelties in the method of window advertisement strike the visitor as suggestive and ingenious. There is practically no attempt to announce "wonderful bargains" with startling placards.

There is uniformity in the prices. Immediately after the Christmas rush of trade they remain the same as before. The regularity in prices gives a certain dignity to the stores, and forcibly suggests that the many articles on sale have intrinsic merit and are not absolutely dependent upon a particular part of the year for their sale. There are sometimes, however, "closing-out sales," when the goods offered are sold much below their original price. In many of the first-class stores, the windows extend down to the floor of the basement, thus giving a larger space for display and presenting attractive and artistic effects.

STREET ADVERTISEMENT.

Perhaps the chief mode of street or public advertisement in Leipsic is the use of a large number of circular columns, about 4 feet in diameter and 12 feet in height, which are stationed throughout the city in conspicuous places. On the cylindrical surfaces of these iron columns, advertisements in great variety are displayed. The form and style used are modest and are usually only small paper placards, of a great variety of colors, announcing the name of the article, its merits and uses. Here, also, are posted the opera and theater programmes, in type not much larger than the ordinary newspaper size. These advertising posts correspond, in a measure, to the fence-display advertising so much used in American cities, but are really not much more than public bulletin boards.

NEWSPAPER ADVERTISING.

The newspaper, however, is probably the most popular medium of advertising in Germany. Here, as in other methods, there is a certain characteristic compactness in the construction of each advertisement. The leading daily paper in this city has sixteen pages, four columns to the page. Selecting at random a copy of this paper, thirty-six out of the total sixty-four columns are found to be devoted to the advertising department. Taking a representative American newspaper, only thirty-one out of ninety-six columns appear to be utilized for advertising purposes. This great difference is doubtless due, to a very considerable extent, to advertising rates, which appear to be much higher in the United States than in this section. But it illustrates, nevertheless, that the newspaper is the recognized channel of advertising and the popular means of promoting trade in this part of Germany. Advertising commission brokers are found in most of the towns and cities, and through their agency space may be obtained for the daily, weekly, and comic papers throughout the Empire.

STREET-CAR ADVERTISING.

Comparatively few advertisements appear in the Leipsic street cars. Contrasted with the gigantic scale on which this feature of display is conducted in the United States, it amounts practically to nothing at all.

Electric cars have recently supplanted the old horse-car system, but there has been so far no appreciable increase in the number of street-car advertisements.

The cars are not constructed in the inside to display cards so as to attract the attention of the passenger. Instead of being arranged along the top of the car windows, they are placed on the ceiling, and their prominence is thereby somewhat limited.

THEATER DISPLAY.

This form of advertisement is utilized considerably. In several of the theaters in this city, permanent signs appear above the stage setting. Photographic and biographic advertisements are also employed. The programmes are devoted largely, as in our country, to the advertisements of local trade.

It may be said, in general, that compared with our energetic methods and the capital we use in developing our advertising business, the United States is far ahead of Germany—at least of this section. But it is also true that advertising here keeps pace with, or perhaps in advance of, the willingness of the manufacturer and retail dealer to expend money in legitimate channels of advertisement and display.

B. H. Warner, Jr.,
Leipsic, *March 21, 1898.* *Consul.*

COLD STORAGE IN TURIN.

The local papers this morning announce that an application has been made in the interest of a Swiss company for a municipal concession which, if granted, may prove of interest to American exporters.

Turin, with a population of 350,000 inhabitants, is the natural and real distributing center for a large area of the surrounding territory, and up to the present time it has never had the benefit of any system of cold storage of meats or perishable products. The inauguration of such a system must, in time, work material changes in the method of conducting many branches of business. The following is the translation of an article which appeared in a morning paper:

> Dr. Joseph Chêne, in the name of a Geneva company, has presented a proposition to the municipality, offering to establish, in the neighborhood of the municipal slaughterhouses, a mechanical ice manufactory and refrigerating establishment for the preserving of alimentary substances, especially meat.
>
> The proposition is submitted by the company on the following terms:
>
> (1) The municipality is to grant its moral support and interest itself to facilitate the success of the enterprise.
>
> (2) For the term of twenty years the municipality is not to construct any other ice manufactory or refrigerating establishment in the city of Turin, or allow anybody else to erect such factory or establishment within the municipal limits.
>
> (3) The municipal administration is to agree not to impose upon the company, for the period of ten years, any new special tax on the industry or business practiced by it in Turin.
>
> The company will agree to provide at once for the erection and fitting up of one hundred and ten refrigerating compartments, of the capacity of from 10 to 12 cubic meters (350 to 424 cubic feet) each, and of fifty similar compartments of the capacity of 6 cubic meters (212 cubic feet) each, and the company will further agree to increase this number as the public interests and convenience may demand.

The maximum tariff of rent to be charged by the company for these compartments will be at the rate of 18 centimes per day for each cubic meter, which is equal to 3½ cents per cubic yard per day, with the promise of more favorable terms to regular customers.

The council has made a favorable report to this request.

PERCY MCELRATH,
Consul.

TURIN, *March 16, 1898.*

PETROLEUM BRIQUETTES IN GERMANY.

Joseph Kohlendorfer, of Landshut, Bavaria, has invented a new process for making petroleum briquettes, by which petroleum refuse is worked up in such a manner as to assume the form of a solid substance, easily handled, and constituting a cheap and convenient fuel.

In this process, about 10 per cent of soda lye, with 10 per cent of any other kind of fatty matter—tallow, for instance—is heated in a boiler, either by superheated steam or the exclusion of air, and enough petroleum refuse is added to the heated mass to make up one hundred parts. This mixture is then heated, under constant stirring, for about an hour, the time varying with the mode and intensity of heating. Attention should be paid to prevent the temperature reaching the boiling point of petroleum, as in this case a large quantity of froth would form. In this incipient state of saponification, the mass acquires the property of taking up large quantities of fluid rock oil, and if this incorporation proceeds too slowly, or remains incomplete, it may be hastened by adding a little soda lye. The mixture is run into molds and allowed to cool, when it may be cut into pieces of any desired form.

Coal dust, sawdust, or other refuse may be added during the process of manufacture, according to the use for which the briquettes are destined; and, if it should be desired to obtain a product of less consistency, the grease may be entirely or partially replaced by resin or resin acid, the product in either case having more than 80 per cent of petroleum, more than 90 per cent of combustible substances, and less than 5 per cent of incombustible residue.

MAX BOUCHSEIN,
Consul.

BARMEN, *March 11, 1898.*

TEXTILE INDUSTRY OF NORTH FRANCE.

COTTON SPINNING.

Lille.—Two new cotton-spinning mills of 1,000 and 2,000 spindles, respectively, were started in Lille in 1897. There was an overproduction during the year in the coarser numbers of cotton, as too many spindles were in motion. There is difficulty in obtaining good workmen in this branch. The industry suffers from the difference that exists between men and women operatives, from the point of view of the length of the legal working day.

Roubaix.—During the second quarter of 1897, the production fell off one-third as compared with the corresponding quarter of the preceding year. This diminution is attributed to the decrease of exportation. Lower prices prevail, both for wool and cotton yarns. Wages remain the same, but the workmen earn less, as the majority are employed only three days weekly.

St. Quentin.—Work has slackened, owing to the overproduction of dress goods. Cotton yarns have fallen in price in a greater proportion than raw cotton. Cotton weaving is far less prosperous than it was last year, there being but slight profit in present prices. White cotton cloth has good sale, however, owing to the Algerian orders.

FLAX SPINNING.

Lille.—The flax-spinning mills are working full force. Those already established have made a slight increase in the number of their bobbins, and a few new dry-spinning mills have been started. In the early part of last year good prices prevailed, but they decreased sensibly toward the close, particularly for dry-spun thread. Hand work is scarce, and there is discontent arising from the difference in the length of the day's work. Owing to protective duties, fine thread has been produced in sufficient quantities to supply the demand of French weavers.

WOOLENS.

Cambrai.—The production has fallen off considerably, much machine as well as hand work having come to a full stop. Notwithstanding the reduction in prices and in working hours, there has not been sufficient work to keep the mills employed, and a large number of workmen have sought employment elsewhere.

Avesnes.—During the first half of 1897 the production of combed wools decreased largely, and the selling price was not satisfactory.

The yarn-spinning establishments that closed have not yet started work. A yarn factory at Fourmies, however, has begun to operate with half force—5,000 spindles and 50 operatives. The decrease in production has been estimated at a little more than a fourth, as compared with former years. The prices paid for manufactures are very low. Out of 22,820 workmen employed in twelve factories, a little more than 2 per cent are idle; and the working day of 8 per cent is reduced from twelve to nine hours, a mean decrease in the profit of 9 centimes (nearly 2 cents) per day. The same condition prevails in the weaving industry, the production having been reduced a little more than one-third. The manufacturer has received no profit, sales having been made at the lowest possible figure. During the summer months men out of employment sought work in the fields. The decrease in orders is attributed to general business stagnation, to prohibitive tariffs in foreign markets, and to competition.

Fourmies.—Raw wools command increasing prices. Spinning is more active, and prices better. There is also a tendency to greater activity in weaving, but prices are still low.

St. Quentin.—Owing to the scarcity of the raw material, worsteds have commanded good prices; but, notwithstanding the low wages agreed upon for the manufacture of yarn, the price obtained is regarded as very low in comparison with that given for combed wool, and there are few sales. In wool weaving an unfavorable condition continues, in consequence of the slight difference existing between the prices of manufacture and sale. Sales are few, either for dress goods in job lots or made to order.

LINENS.

Lille.—There has been little activity in linen production, as the south of France, which consumes the greater part of the Lille production, has suffered from floods and slender harvests. In many towns work has ceased, and in others the hours have been decreased. Prices have fallen at least 3 per cent during the last six months.

BATISTES AND LAWNS.

Cambrai.—Work is active and workmen abundant, as those who abandoned wool weaving for batiste weaving have not been able to return to their old industry, which is oversupplied with workmen for present needs.

TULLE AND LACES.

Cambrai.—Active work continues in the tulle industry at Caudry, and the number of machines has increased. In laces the dull season lasted longer than the preceding year.

EMBROIDERY—CURTAINS AND GUIPURES.

St. Quentin.—Embroidery sales are rather dull, a few factories having closed in the neighborhood of St. Quentin. Toward the close of the year, however, work became more active, and prices of high-class goods increased, as did also the exportation. There have been large sales of window curtains and guipure laces at reduced prices, however, owing to the heavy production and the general dullness of the market.

DYEING, BLEACHING, AND DRESSING.

Cambrai.—Work is dull in dyeing and dressing, owing to the small production in spinning and weaving factories. There is very little bleaching of cotton laces; more is done in the linen articles. Workmen are scarce.

W. P. ATWELL,
Commercial Agent.

ROUBAIX, *March 29, 1898.*

BREMEN'S COTTON TRADE.

Bremen's cotton trade maintains now, as in the past, its superiority over that of Hamburg in supplying the German, Austrian, Russian, and Polish markets. Hamburg's efforts to compete with Bremen in this line have as yet been unsuccessful.

Cotton is clearly Bremen's most important article of import, 223,779 tons, valued at 179,500,000 marks ($42,721,000), being entered in 1896. The year before, the quantity was 275,861 tons, valued at 181,500,000 marks ($43,197,000). The decrease may be accounted for by the small crop of the year and the large stock left over from the one preceding. Hamburg had the same experience; in 1896, 99,057 tons, valued at 70,200,000 marks ($16,707,600), were imported, against 101,189 tons, valued at 68,200,000 marks ($16,231,600), in 1895. It is seen that Bremen's cotton trade is more than double that of Hamburg, and this condition has not been altered by the time-contract deliveries introduced by the Hamburg Exchange some years ago in order to forward the cotton trade. The sales on time delivery at Hamburg in 1896 amounted to 70,900 bales, against 101,200 bales during the preceding year.

Bremen is enlarging its cotton transactions and is keeping a more varied stock, as regards origin, on hand. The position of the two cities is reversed with regard to sheep wool. Hamburg's import of this article was valued at 129,000,000 marks ($30,702,000) in 1896, while Bremen's was only 93,500,000 marks ($22,253,000).

THOS. EWING MOORE,
Commercial Agent.

WEIMAR, *March 18, 1898.*
No. 213——7.

COTTON SPINNING IN JAPAN.

Consul-General Gowey sends from Yokohama, under date of March 2, 1898, a clipping from the Japan Times of March 1, 1898, relative to the cotton-spinning industry during the past six months. The clipping reads, in part:

> The last half year was a critical period for not a few spinning companies, and, upon the whole, a highly trying time for all engaged in the industry. During the six months in review the number of spindles in operation was, on an average, 781,619, against 592,425 during the corresponding half of the previous year. The cost of production was increased in all items, while the market price of yarns rose only very little, thereby subjecting all the cotton mills to serious trouble. With some mills the profit cleared per spindle ranged between 2.077 to 4.378 yen ($1.03 to $2.18), but in others no profit at all was declared. However, taken as a whole, the profit declared was 8.8 per cent per annum, as against 14.3 per cent declared for the previous half year. This general result must be regarded as fairly good, considering the adverse circumstances. For, while the price of coal rose by 75 per cent, the wages of male and female operatives by 16 and 18 per cent respectively, and the market price of raw cotton by 7 per cent, the rise of the yarn market did not exceed 1 per cent. Under such circumstances the cotton mills could not spare much in favor of reserve funds, and a sum corresponding to only a little over 1 per cent of the total paid-up capital was laid by.

Under date of March 9, 1898, Mr. Gowey transmits the following additional statistics (taken from the Japan Gazette of even date), showing the state of the cotton-spinning industry in Japan during December, 1897:

Total number of spinning mills existing		65
Number of spindles		773,738
Weight of yarn spun	pounds	17,466,274
Weight of cotton consumed	do	20,471,141
Weight of waste cotton	do	2,770,280
Weight of coal consumed	do	43,886,091
Aggregate horsepower		21,610
Number of male operatives employed		12,672
Number of female operatives employed		42,656
Number of working days		26
Average daily working hours		12½
Average daily wages of male hands	sen	*23.37
Average daily wages of female hands	do	†14.57
Cost of one bale of yarn	yen	‡85.45

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* 11.6 cents. † 7.2 cents. ‡ $42.725.

HARVEST OF FLAX AND HEMP SEED IN RUSSIA DURING 1897.

According to data of the central statistical committee, the harvest of flax and hemp seed in Russia during the year 1897 was much below that of 1896. Thus, in 1896, 1,018,674 tons of flaxseed were harvested, and in 1897 only 727,920 tons—*i. e.*, 28.5 per cent less. This decrease is so much the greater, as the area under flax increased in 1897, amounting to 5,748,300 acres, against 5,497,200 acres in 1896.

The following table shows the decrease of the crop per acre in 1897 in the most prominent governments:

Government.	Crop per acre.	
	1896.	1897.
	Pounds.	*Pounds.*
Voronezh	667	275
Don region	567	108
Ekaterinoslav	619	408
Kursk	626	414
Kuban region	521	202
Orenburg	362	162
Samara	606	288
Saratov	632	360
Stavropol	439	91
Ter region	356	95
Ufa	427	138

Of the sixty-five governments, but twenty-three showed an increase over 1896, while forty showed a decrease. The twenty-three governments are situated in a row along the western frontier of Russia. This line begins with the government of Kherson, continues with Bessarabia and Podolia, the Kingdom of Poland, the northwestern and Baltic governments, takes in the governments of Smolensk, Novgorod, and Tver, and ends in the government of Kostrona. It is evident that the increase of crop was influenced by the proximity of the sea, which causes frequent rain.

In some governments, especially those of Stavropol and the Don region, the increase of the area under flax was large, and, owing to that fact, the crop was improved.

A decrease of the area was to be observed in only twenty governments, and was inconsiderable. On the contrary, everywhere there is a tendency to increase the area under oleiferous seeds, not only of flax, but of hemp and others, of which no correct data are to be had.

The harvest of hemp seed, notwithstanding a small increase in area, decreased greatly as compared with last year. Thus, in 1896, 421,308 tons were harvested, whereas in 1897 there were only 316,800 tons—*i. e.*, nearly 25 per cent less.

An increase of the harvest is also observed in the governments lying along the western frontier of Russia—Kherson Podolia, Bessarabia, the greater part of the governments in the Vistula region, the Baltic governments, St. Petersburg, and Novgorod (twenty governments out of sixty-five). The drought had special influence in the governments which take part in the export trade, as will be seen by the following table:

Government.	Crop per acre.	
	1896.	1897.
	Pounds.	*Pounds.*
Kaluga	405	209
Kursk	389	310
Moguilev	443	389
Orel	346	261
Poltava	499	336
Simbirsk	590	292
Smolensk	534	444
Tambov	263	158
Chernigov	370	356

The decrease of the crop of hemp seed was so great, that the sale of same at the ports ceased soon after the opening of the season. It is enough to state that the net results of the harvest, after deducting seeds for the sowing, were equal to 179,532 tons, whereas in 1896 there remained 283,788 tons—*i. e.*, the supply was nearly one-half less. The flaxseed was in a better condition, and the decrease was only one-quarter—*i. e.*, from 777,150 tons in 1896 to 566,928 tons in 1897. Such a failure in the supply caused a considerable advance in the prices of flax and hemp seed during the season of 1897–98.

W. R. HOLLOWAY,
Consul-General.

ST. PETERSBURG, *March 30, 1898.*

COMMERCE OF GREECE, 1897.

The bulletin of the foreign trade of Greece for the month of December, 1897, having been issued by the Ministry of Finance, it is now possible to make a brief statement concerning the import and export trade of this country during the year 1897. I regret, however, that the data these monthly bulletins contain do not enable me to report on the value of the trade with the United States.

Notwithstanding the war with Turkey, which greatly hampered Greek trade during more than half of the year 1897, the value of the exports from Greece during the twelve months reached the sum of 80,734,074 francs gold ($15,581,676), an increase over the year 1896 of 7,873,643 francs ($1,519,613), the increase being attributable to the currant crops exported, which figure in the returns for 31,841,759 francs ($6,145,460), as against 23,208,178 francs ($4,479,179) in 1896.

The value of the imports into Greece during the year 1897 was 114,761,525 francs ($22,148,975), being an increase of 1,156,910 francs ($223,284) over the imports of 1896; the principal increase being in cereals, which figure on the returns for 33,140,633 francs ($6,396,142), as against 29,202,491 francs ($5,636,080) in 1896.

During the year the customs receipts on imports (no export duties are levied) amounted to 26,637,543 drachmas (about $3,462,881), a decrease of 710,662 drachmas (about $92,386) from the amount levied in 1896.

Altogether, the foreign trade of Greece during the past year shows great steadiness and a surprisingly healthy condition.

W. W. ROCKHILL,
Minister.

ATHENS, *March 15, 1898.*

DUTIES ON SPIRITS AND TOBACCO IN GIBRALTAR.

A report from Consul Sprague, of Gibraltar, dated February 26, 1898, informed the Department that, with a view of increasing the revenues of the colony, an ordinance had been issued on that date fixing the duties on wines, spirits, beer, and tobacco as follows:

	s.	d.	Cts.
Wines:			
In bottles ... per dozen	1	0	=24
In wood or skin ... per gallon	0	4	= 8
Spirits, strong waters, liqueurs, and cordials:			
For every gallon of spirits or strong waters, of any strength not exceeding the strength of proof by Sykes' hydrometer, and so in proportion for any greater strength than the strength of proof...	4	0	=97
For every gallon of liqueurs or cordials, irrespective of strength...	4	0	=97
N. B.—A similar duty shall be payable whether the spirits introduced are for the purpose of being infused into liquids of any kind or not.			
Malt liquors:			
For every gallon ...	0	0½	= 1
(Beer hogsheads are considered as containing 50 gallons; tierces, 32 gallons; kilderkins, 16 gallons; firkins, 8 gallons—subject always to inspection and measurement when deemed expedient.)			
Tobacco ... per pound...	0	1	= 2

The privilege of reexportation, free of duty, says Mr. Sprague, was granted tobacco when stored in bond. All the duties were to be paid in sterling money

Under date of April 6, the consul writes that the ordinance went into effect on April 1, affording little time to those interested in the tobacco trade to increase their stocks. He adds:

Some of the most enterprising, however, succeeded in importing considerable supplies just a few hours previous to the imposition of the present duty.

An approximate estimate of the quantities of tobacco which were landed in February and March, 1898, and stored to await the future demands of this market, is as follows: Direct from New York and via Liverpool by German and British steamships, 415 hogsheads and 1,799 cases; from Austro-Hungarian, Dutch, and German states, 6,184 bales and 149 cases. It is calculated that this will be sufficient to last two years, much depending, however, upon what might be required to meet the export trade from this port, which, owing to its general character, renders the traffic somewhat uncertain.

Wines and spirits, the duties on which are now increased on account of importers being required to pay them in British sterling coin, were also imported in large supplies, causing a scarcity in warehouse room.

WIRELESS TELEGRAPHY IN WALES.

The inventions of Herz and Marconi, respectively, have commanded much attention within recent years, and there has been a general feeling prevailing in this country that the experiments being conducted under the auspices of the Postal Department would result in the early establishment of telegraphic communication between distant points unconnected by wire.

It was reported in the press last year that Signor Marconi was personally experimenting within the limits of the port of Cardiff; that he had succeeded in demonstrating the practicability of his invention; and that Mr. W. H. Preece, the engineer-in-chief to the general post-office, was quite satisfied with the result. Mr. Preece has, in fact, long since had a system of wireless telegraphy at work at St. Martin's Le Grand, London, in connection with the general post-office buildings, but the intervening space has been necessarily limited, although intervening bricks and mortar have no effect upon the communication.

Mr. Preece has personally spent a good deal of his time intermittently upon the experiments in this locality. It seems that a cable was laid across from Lavernock Point, near Barry Dock, to

Flat Holm Island, in the Bristol Channel, at an enormous amount of labor and expense, only to find that all had been wasted, because so many vessels drop anchor in these waters that the cable was dragged about and broken within one week from the time it was laid. Consequently, Mr. Preece set himself the task of experimenting with "wireless telegraphy," and under the direction of Mr. J. Gavey, his chief assistant, no effort has been spared in determining upon the best practicable method of applying it. With 3¾ miles of water space between the points, no better place could be found for practically testing the new system; and, now that the desired communication has been established, the attention of the whole scientific world will be directed to it, and Mr. Preece will doubtless be invited soon to describe his experiments and their results.

The invention of Marconi has become familiar to, although perhaps not fully understood by, the lay mind, the theory having long since been made public property, and it being generally supposed that the system associated with the name of this young inventor would be adopted. But it transpires that Mr. Preece has perfected a system of his own, and has arrived at a satisfactory solution of this great scientific problem of telegraphing through a space of no less than 3¾ miles. It should be mentioned that as far back as 1892 the results obtainable were such as to justify the expectation of the desired end, but the various methods tried have all been more or less affected by disturbing influences. The system arrived at may be described as electro-magnetic, and is claimed to be free from such disturbances. The introduction of a very large copper wire and the alteration of the instruments, so as to embody certain desiderata, have been made; and it is stated that no less than forty words per minute have been transmitted without any necessity having arisen for obtaining a single repetition. If this report be true (and there appears to be ample confirmation that it is so), the most sanguine expectations of persons interested in this latest scientific wonder have been fully realized.

The following brief description appeared in a local newspaper on March 29:

> Copper wires of a very large gauge have been erected parallel with each other, one on the sea front at Lavernock Point and one across the Flat Holm, near the light-house—3 miles apart—and the Morse code signals transmitted are very distinct. Many improvements in the apparatus have been introduced since the previous trials were carried out, and it is very satisfactory to know that a high speed of working has been attained. The vibrations transmitted through space from the electric motor produce on the telephone receiver a most pleasing tone, and the combination of dots and dashes are easily readable by a manipulator. As many as forty words a minute have been signalled across and read without any difficulty whatever. There can be no doubt that the system of communication now permanently established between the fort on the mainland to the fort on the Flat Holm will

mark an important epoch in the telegraphic developments of the century, and Mr. W. H. Preece is to be congratulated on the great success his method has attained. The two methods of so-called wireless telegraphy, which have recently created such widespread interest, were fully explained to a Cardiff audience at Mr. Gavey's recent lecture before the Cardiff Naturalists' Society. The post-office has considered it wise, for various reasons, to establish the permanent communication between Lavernock and the Flat Holm by means of the electro-magnetic rather than by Marconi's system, and, without entering into technical details or criticising the action of the Department in this matter, we can merely say that a thoroughly satisfactory and trustworthy telegraph service is now established between these two points which, there is every reason to believe, will be free from the disturbing influences to which other methods are subject.

From other sources, I gather that on the mainland a stout copper wire has been fixed, as ordinarily, to poles, the length of the wire being three-fourths of a mile. The ends of this wire run into the sea. On the island a similar wire runs exactly parallel, as previously mentioned, to that on the mainland; and the length of the island wire is about half a mile, with the ends run to earth. It seems that the length of the parallel wires is governed by the extent of the space between them. The transmitting and receiving apparatus are duplicated, and it is said that the system is less costly than that of Marconi; that the parts of the apparatus are not so delicate; and that the necessity of having the instruments practically tuned to a nicety does not enter into its efficiency. The theory of electro-magnetic waves—that when wire A is charged with the current, so is its "field;" and that the circles of waves enlarge until they meet a conductor in wire B, which becomes charged to a certain extent—suggested to Mr. Preece the idea of his method; and the dots and dashes of the Morse system of telegraphy made it possible, the dot requiring a connection of shorter duration than the dash; and, as is well known, the arrangement of dots and dashes forms any letter or combination of letters desired.

Ingenious mechanism is attached, by which a clear, musical note—C has been chosen as the best for hearing—is created. By means of a brass circle, in which there is an indentation at every three-eighths of an inch, the current is automatically interrupted at the rate of 250 makes and breaks per second, and when the dots and dashes are made by the operator at one end they may be heard at the other through an ordinary telephone. A great difference between this system and Marconi's is that the messages are read by sound, while in the young Italian scientist's they are recorded. This, I need hardly say, is of no importance; but if it be true that in Preece's system the transmission is no less than four times as speedy, the advantage is greatly in its favor. I may add that, instead of the ordinary "sounder," a telephone arrangement is brought into requisition, and the interpretation of the vibratory signals is said to be quite easy.

Now that a permanent system of wireless telegraphy for communicating through space has been established, a new impetus will doubtless be given to further scientific researches in that direction. It is said that what led Mr. Preece to utilizing electro-magnetic induction was having it brought to his notice officially that, while messages were being transmitted over the post-office telegraph wires in Gray's Inn road, London, sounds could be picked up from the neighboring telephone wires. Thus, his mind was directed to the possibilities of the subject, it being obvious that the influencing of one wire by the current sent through another was inductive. This happened many years ago; but this famous electrician has been patiently experimenting ever since, until at last success has crowned his efforts. The hope of electricians to bring about telegraphic communication between vessels at sea and distant shores seems about to be realized, and soon the "transmitter" and "receiver" will be deemed essential on board every kind of craft sailing on the highways of commerce.

DANIEL T. PHILLIPS,
Consul.

CARDIFF, *March 30, 1898.*

MERCHANDISE MARKS IN GREAT BRITAIN.

The Department is in receipt of a note from the British embassy, as follows:

WASHINGTON, *April 23, 1898.*

SIR: I have the honor, by direction of Her Majesty's Principal Secretary of State for Foreign Affairs, to transmit to you herewith copies of a memorandum recently prepared by the commissioners of Her Majesty's customs, setting forth the general requirements in respect of marks on foreign goods imported into the United Kingdom.

I have, etc.,

JULIAN PAUNCEFOTE.

The Hon. JOHN SHERMAN,
Etc., etc., etc.

MEMORANDUM RESPECTING MARKS ON GOODS IMPORTED FOR HOME CONSUMPTION.

1. Foreign goods imported into the United Kingdom which do not bear any marks whatever, either on the goods themselves or on the packages or wrappers containing them, are not required to bear any qualifying statement or indication, such as "Made abroad," "Made in Germany," etc.

2. Foreign-manufactured goods bearing a name or trade-mark, being, or purporting to be, the name or trade-mark of a manufacturer, etc., in the United Kingdom, must have that name or trade-mark accompanied by a definite indication of the country of origin of the goods. The name of the country is a sufficient indication, without the words "made in," if a name or trade-mark only appears, *e. g.*, "John Smith, Germany," would be satisfactory. If such a mark as "John Smith,

Sheffield," is used, then the qualification must be "Made in Germany," or similar wording.

3. If foreign-imported goods bear the name of a place identical with, or a colorable imitation of, the name of a place in the United Kingdom, the name should be accompanied by the name of the country in which the place is situated. Thus Boston, in Massachusetts, should be accompanied by the name "United States," or by the initials "U. S. A."

4. If a trade description includes the name of a place, and the goods on which it appears are not the produce of that place, or of the country in which it is situated, the trade description must be accompanied by a statement indicating the actual country of production. For instance, a wine, the produce of Germany, and described as "port" or "sherry" (which words include the names of the places Oporto and Xeres), should have that description accompanied by the statement "produced in Germany," or should be described as "German port," or "German sherry." An exception to this rule is made in cases where the name of a place in a trade description is indicative merely of the character of the goods, and is not calculated to mislead as to the country of origin. Thus, such a description as "Brussels carpet," or "Portland cement," need not be accompanied by a statement of the country of actual production.

5. Trade descriptions in the English language applied to foreign goods imported for home consumption from non-English speaking countries are not regarded as indirect indications that the goods are of British or Irish origin, unless the officers have good ground for considering that such trade descriptions are specially designed to convey, and do in fact convey, an impression of British or Irish origin for the goods.

Trade descriptions on imported goods in a foreign language, which is not that of the country from which the goods are imported, must be accompanied by a statement of the actual country of production of the goods, *e. g.*, "Made in Germany."

6. As regards watches, any mark on the case is deemed to extend to the watch. If, therefore, a watch case is made in this country, and bears any statement or indication of such origin (as, for instance, a British Hall-mark), and the watch itself is made in Switzerland, then there must appear on the plate of the watch a statement or indication that it is of Swiss origin.

7. All qualifying statements or indications must be distinct, in equally conspicuous characters with, and in proximity to, the marks they are intended to qualify.

8. Marks on samples or patterns, whether of British or foreign manufacture, are not required to be accompanied by any qualification, provided such samples or patterns are valueless in themselves, do not form whole or complete articles, and can be readily distinguished as samples or patterns.

CUSTOM-HOUSE, *London*, *January 28*, *1898*.

DANISH CHALK.

Danish chalk from "Kridtbrudet Stevns Klint" is favorably known throughout the world, owing to its great pureness. It is exported to Russia, Germany, Sweden, and Norway in large quantities, and smaller lots have also been sent to the United States. That the export to the United States has been so small, is owing to the great difficulty in finding vessels at reasonable freights; but there are now good prospects of great development, as freights rule very low on account of the enormous import of corn from the United States to Denmark, and steamers are willing to take return freight of chalk for ballast at next to nothing. I am informed that 1,500 tons have just been sold for shipment to the United States.

Stevn is situated about 20 miles south of Copenhagen, and the cliff, 8 miles long, rises from the sea about 100 feet and consists of chalk formations in inexhaustible quantities. The quarry is worked by the Taxe-Limhamu Kalk Creed, of 26 St. Annaeplads, Copenhagen.

The chalk from Stevn is of an unusually fine, white, and soft quality, and the analysis is:

	Per cent.
Chalk *	55.44
Oxide of iron and alumina	0.3
Magnesia	0.41
Matter insoluble in acids	0.25
Combustible matter	43.6
Total	100

The analysis does not vary from year to year, the quality being even. The nearness of the quarry to the sea makes shipment by small vessels convenient, as the depth of water at the dock is only about 17 feet. The shipments intended for large steamers are generally made by lighters, which are towed to Copenhagen and discharged there. The price varies according to the freight rate obtainable, but I am informed that the chalk can be delivered at about $2.25 per ton of 2,240 pounds, including freight and insurance to New York.

Chalk is used for building purposes, lime burning, glass making, manufacture of cement, colors and polishes, putty, wall papers, etc.; and as I am of opinion that American manufacturers can use the Danish chalk with advantage, I have the honor to call their attention to it.

Flint stones (pebbles) of excellent quality are also found at Stevn and exported to the United States; the price is about $15 per ton of 2,240 pounds, cost, insurance, and freight New York.

JULES BLOM,
Vice and Deputy Consul.

COPENHAGEN, *March 25, 1898.*

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* Equal to carbonate of lime 99 per cent.

DECREASE IN THE RUSH TO THE KLONDIKE.

There has been a decided change in the volume of travel north since my report of February 15, 1898.* Then it was largely in excess of the estimates; but the rush culminated about March 1, and since then has decreased to one-fourth of the travel during February. The difficulty experienced at that time to secure transportation for the prospectors has changed, so that now it is a problem for the various steamers, even at reduced rates, to secure sufficient patronage to defray expenses. Instead of adding to the large fleet then engaged in the trade between Puget Sound and Victoria and the different Alaskan gateways to the Klondike region, several vessels have been withdrawn from the service, and are now lying idle, at serious loss to the owners and lessors. The vast crowds during January and February caused several vessels to be leased at rates varying from $400 to $800 per day for the season; but since March 1 several of these have been withdrawn, the lessees finding it less disastrous to let them lie idle than to run them with scarcely enough passengers and freight to pay for the coal consumed.

The demand for miners' licenses at the custom-house in Victoria has dropped from an average of 200 per day (sometimes even reaching 600 or 700) to an average of less than 50 per day. The same great falling off is shown at all the points where licenses can be obtained.

The correspondence at this consulate in regard to the Klondike has almost entirely fallen off, and the Americans calling here on their way to the Yukon, desiring information or assistance, have also dropped to a very small number.

Several transportation companies have been compelled to temporarily suspend business, having suffered serious losses.

The defeat of the proposed Stikine–Teslin Railway subsidy bill in the Canadian Senate is regarded here as an abandonment of the proposed railroad for this year, and the provincial government has determined to immediately build a wagon road along the same route. A large party of men are already at work, and will at once corduroy all the swamps between Glenora and Teslin Lake. It is expected that this road will be completed and ready for travel by June 1.

It is believed there are at least 3,000 people at Copper River, and as many along the Stikine River beyond Wrangell, while double that number are choking the passes beyond Dyea and Skagway, many of the latter suffering great hardships. Only to-day the news has been received here of a snow slide at Sheep's Camp, beyond Dyea, which resulted in great loss of life, almost entirely of American citizens who recently left the United States for the gold fields.

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*See CONSULAR REPORTS No. 211 (April, 1898), p. 571.

ABRAHAM E. SMITH,
Consul.

VICTORIA, B. C., *April 9, 1898.*

THE SOUTH WALES COAL TRADE.

Under date of April 1, 1898, Consul Phillips writes from Cardiff:

To the dismay of traders generally and of all interested in the coal business, which is the staple trade of this district, several thousand "colliers" have this day commenced a strike. There has been more or less uncertainty prevailing for some time past as to what general action would be taken after the 31st of March, for upon that date all contracts were to cease by virtue of a month's notice issued by the employers. The miners have been uneasy for a good while, because they are convinced that the "sliding scale" on which their wages are regulated, according to the average selling price of coal during the previous three months, has, since its latest revision, been operating in a manner detrimental to their interests; and accordingly they issued a six months' notice to the coal operators to terminate the scale.

The next move was made by the latter, who on the 1st day of March gave notice that all contracts would cease between themselves and the workmen on the last day of the month. Meanwhile, a conference was held at Cardiff, and when it became evident that the negotiations could not be completed within the time specified, the Coal Masters' Association issued a fresh notice extending the time nine days.

The employers have expressed a desire that the representatives of the miners should be invested with plenary powers to arrange terms of settlement, but the result of a ballot which has just been taken shows that a considerable majority are opposed to such a step. Moreover, the employees in many collieries have repudiated the action of their representatives in accepting the extended nine days' notice, and have, as previously stated, ceased work to-day.

The sliding scale governs the wages of the entire coal field; but there remain, outside of the Coal Masters' Association, a number of operators who form, roughly speaking, about 10 per cent of the whole. For reasons of their own, these employers prefer not to join the association, although they are, of course, governed in the matter of advances and reductions of wages by the award of the sliding-scale auditors.

There has recently been a marked improvement in coal prices, and on account of this the miners at the nonassociated collieries are demanding to-day a general advance of wages of 20 per cent; and one firm has promised to make a concession similar to whatever may be granted by a more important firm. Much will depend, therefore, upon the step taken by any one of the employers. Presuming that in one such case an advance of 15 per cent be granted and accepted, the general demand will be for that amount.

The battle royal to be fought will be upon the question of the new sliding scale. On several occasions, the scale has been terminated by the necessary six months' notice on the part of both employers and employees, respectively, with a view to its readjustment. It is really a very difficult matter to adopt a scale which, under all circumstances, will give satisfaction to both parties, and this difficulty is enhanced by the peculiar monetary system of pounds, shillings, and pence. For instance, the scale for some time worked at the rate of 8¾ per cent of the standard wage of 1879, for every shilling alteration in the price of coal during the preceding quarter. It will be at once apparent that a decimal coinage, such as that of the United States, would permit a far better arrangement by providing a more sensitive scale. However, this scale system, which is always giving more or less dissatisfaction to one or other of the parties, has undoubtedly been the salvation of the South Wales coal trade for nearly twenty years, and has usually been successful in preventing strikes and lockouts; and it will cause general regret if the attempt to readjust the scale will now fail because the men may not succeed in obtaining the original scale of 10 per cent advance upon the standard, for every shilling alteration in the price of coal.

The coal exchange is much agitated to-day, and for a time, at all events, shipping will be much interfered with; and what the immediate future will bring it is impossible to foretell.

The following is extracted from to-day's issue of the Western Mail, a Cardiff newspaper:

> Never, probably, in the history of the South Wales coal field has the situation been less satisfactory or the outlook more gloomy than it is at present. Everything is in a state of chaos, and the strong man is nowhere to be seen who will be able to reduce it to any kind of order. As we have pointed out more than once, this state of things is mainly due to two causes—first, the want of confidence on the part of the men in their leaders, and, secondly, the divided state of opinion among the men themselves. The first of these causes is obvious from the fact that the men's representatives have been repeatedly sent to sliding-scale committees without the necessary sanction or power to transact business, and the second is well illustrated by the

present state of affairs throughout practically the whole of the mining area of Glamorganshire and Monmouthshire. Here we have a number of pits urging that they should abide by the decision arrived at at the last Cardiff meeting, and a number of others clamoring for the rescinding of all past arrangements. Some are loud for a cessation of operations forthwith, whilst others, endowed with a grain more of common sense, are advocating a little longer delay, in the hope that diplomacy may effect a satisfactory settlement of the dispute. This is precisely how things stand, and, while the situation remains thus, it is useless to seek for a remedy. Looking at the situation from a perfectly impartial point of view, we are forced to admit that the fault in the present case lies entirely with the men. No possible blame can be laid on the shoulders of the employers. They are out of the question altogether. Nor can the men's representatives, with any shadow of fairness and justice, be found fault with. It is the men, and the men only, who are the guilty parties, and it is a kindness to convince them of the absurdity and foolishness of their position. It is incomprehensible to us that any number of sensible men could be guilty of so much stupidity, except upon the ground that they labored under a delusion. Possibly, the men believe that the masters will eventually concede their demands, and argue that, this being the case, the sooner matters are brought to a crisis the better.

Consul Phillips transmits the following on April 13:

A consultation was held on the 12th instant between the workmen's provisional committee and the employers' emergency committee, and the only result was the insistence of the latter that terms of agreement could not be discussed until the workmen's representatives were granted plenary powers to effect a settlement. The employers had previously intimated that this would be essential, but the miner's convention balloted the question in every colliery, with the result that an enormous majority of votes was registered against granting such powers; otherwise the matters in dispute would have been discussed before the stoppage took place. Now that the employers insist upon plenary powers as a sine qua non, the only course open to the provisional committee is to convene another meeting of miners' delegates, to be held to-morrow, when it will probably be resolved to have the question balloted again. Thus, a few more days' delay is inevitable before the discussion commences, and how long that will last is very uncertain. Fortunately, nothing like a quarrel exists, both sides being apparently desirous of effecting an amicable settlement; hence, although there is a great divergence between the claims of the workmen and the terms suggested by the employers, there are not the usual premonitory symptoms of a long and bitter struggle, albeit the outlook is by no means reassuring, and there are absolutely no signs of immediate settlement. On the other hand, if the powers referred to are granted, a modus vivendi may be arrived at for resuming work early, even though the final settlement will be delayed. The following cutting from a local newspaper of this date explains in tabular form the proposals of the men and of the masters, and also the scale which has just elapsed:

Expired scale.		Scale offered.		Scale demanded.	
When the average selling price of large coal shipped is—	Wages to be the following percentage above the wages paid at the respective collieries in December, 1897.	When the average selling price of large coal shipped is—	Wages to be the following percentage above the wages paid at the respective collieries in December, 1879.	When the average selling price of large coal shipped is—	Wages to be the following percentage above the wages paid at the respective collieries in December, 1879.
s. d.	*Per cent.*	*s. d.*	*Per cent.*	*s. d.*	*Per cent.*
7 10¼ to 8 0	None.	7 8 to 8 0	None.	Under 10s.	20
8 1.71	1¼	8 4	2½		
8 3.43	2½				
8 5.14	3¾				
8 6.86	5	8 8	5		
8 .57	6¼				
8 10.29	7½	9 0	7½		
9 0	8¾				
9 1.71	10	9 4	10		
9 3.43	11¼				
9 5.14	12½				
9 6.86	13¾	9 8	12.83		
9 8.57	15				
9 10.29	16¼	10 0	15.66		
10 0	17½				
10 1.71	18¾	10 4	18½	•10 1½	21¼
10 3.43	20			10 3	22½
10 5.14	21¼	10 8	21.33	10 4½	23¾
10 6.86	22½			10 6	25
10 8.57	23¾	11 0	24.16	10 7½	26¼
10 10.29	25			10 9	27½
11 0	26¼			10 10½	28¾
11 1.71	27½	11 4	27.32	11 0	30
11 3.43	28¾			11 1½	31¼
11 5.14	30	11 8	30.48	11 3	32½
11 6.86	31¼			11 4½	33¾
11 8.57	32½	12 0	33.65	11 6	35
11 10.29	33¾			11 7½	36¼
12 0	35			11 9	37½
12 1.71	36¼	12 4	36.82	11 10½	38¾
12 3.43	37½			12 0	40
12 5.14	38¾	12 8	40	12 1½	41¼
12 6.86	40			12 3	42½
12 8.57	41¼	13 0	43.16	12 4½	43¾
12 10.29	42½			12 6	45
13 0	43¾			12 7½	46¼
13 1.71	45	13 4	46.32	12 9	47½
13 3.43	46¼			12 10½	48¾
13 5.14	47½	13 8	49½	13 0	50
13 6.86	48¾			13 1½	51¼
13 8.57	50	14 0	52.66	13 3	52½
13 10.29	51¼			13 4½	53¾
14 0	52½			13 6	55
Under this scale, should the price of coal be under 7s. 10.25d., the wages would be lower than the wages paid in 1879 in the proportion of 1¼ per cent for each 1.71d. fall in price.		Under this scale, should the price of coal be under 7s. 8d., the wages would be lower than the wages paid in 1879 in the proportion of 2½ per cent for each 4d. fall in price.		13 7½	56¼
				13 9	57½
				13 10½	58¾
				14 0	60

The article continues:

> The most important feature in the scale proposed by the men is the minimum wage of 20 per cent above the standard. During fifteen of the past twenty-one years the average price of large coal has been below 10s., and during only six years has it averaged over 10s. per ton. In other words, this demand means to the owners that the effect of the minimum as compared with previous sliding scales will be to make wages considerably higher at the very time when the price of coal falls to a level, which, in the case of a great number of collieries, is unremunerative. On the other hand, the men urge that it may result in the owners refusing to sell their coal under 10s. per ton. That it should have this result is more than doubtful, and, even if it did, it would in slack times mean shutting down a number of collieries, which would certainly not be to the advantage of the colliers. Whichever way it is looked at, there is no question that the demand for the minimum is far and away the most important point in the dispute.

British Board of Trade returns, says Mr. Phillips, show that during the past month the aggregate shipments of coal, foreign and coastwise, at the South Wales ports amounted to 1,828,574 tons, as against 1,740,400 tons exported in the corresponding period in 1897, while, compared with February, the returns for March show an increase of 165,781 tons. On the other hand, there has been a falling off in steel and coke exports of 6,233 tons and 3,154 tons, respectively.

The consul also sends figures showing a continued decrease in the exports of tin plate, and adds:

The iron and tin trades are affected by the coal conflict, several of the leading iron and steel works having already shut down for want of coal supplies. For domestic purposes coal has already run up to $12 per ton, and, instead of exporting coal, a considerable quantity is now being imported from other districts, at prices ruinous to manufacturers.

ANGLO-AMERICAN CHAMBER OF COMMERCE IN BELGIUM.

A meeting was held March 24, 1898, at the Hotel Mêtropole, Brussels, to consider the question of founding a chamber of commerce to promote and protect the interests of American and English merchants in Belgium. The chair was taken by the British consul-general at Antwerp, who was supported by the United States consuls at Brussels and Antwerp. It was resolved—

(1) That this meeting is of opinion that a chamber of commerce be formed for Belgium, to be called the Anglo-American Chamber of Commerce.

(2) That the council consist exclusively of British and American subjects, but that foreigners of all nationalities be eligible as members of the chamber of commerce.

On April 3, a meeting was held at the British consulate-general at Antwerp, at which the following resolution was offered and carried:

> The objects of the Anglo-American Chamber of Commerce are: To promote measures calculated to benefit, protect, and forward the mercantile and trading interests of its members in Belgium; to represent and express their sentiments on commercial affairs; to collect statistics bearing upon the trade and manufactures of Great Britain and the United States of America; and to establish a commercial library and a museum of samples in Brussels.

A meeting was held by the committee in this city on April 6, and, although no locale for future meetings has as yet been decided upon, the chamber of commerce will be an accomplished fact in a very short time.

Any communications addressed to No. 170 Rue Royale, Brussels, will reach the Anglo-American Chamber of Commerce.

GEO. W. ROOSEVELT,
Consul.

BRUSSELS, *April 7, 1898.*

BELGIAN EXPORTS TO THE UNITED STATES.

FIREARMS.

Consul Gilbert, of Liege, under date of April 8, 1898, says:

The declared value of firearms exported from this consular district to the United States for the year ending December 31, 1897, was $635,017.22. Similar exports for the year 1896 were $563,207.03. For the year 1895, they amounted to $515,041.22. From these official figures, it results that the year 1897 shows an increase over 1896 in such exports of $71,810.19, and the year 1897 exceeds in value that of 1895 by $19,978.

During the first quarter of the year 1898, firearms were invoiced at this consulate to the amount of $89,366.11. The first quarter of the year 1897, the invoice value was $165,409.54. For the same quarter of 1896, the amount was $76,032.76; and in the corresponding quarter of 1895, $32,394.23. The exports of firearms for the first quarter of the year 1897 were abnormal. In view of the expected change in the tariff, United States importers bought all guns in sight, to be entered before the new tariff became effective.

The exports of firearms for the first quarter of the year 1898 exceed in value those of the same quarter of any other year except 1897, and were normal, being only to supply the current demands of the trade in the United States. The number of guns was also far in excess of the exports for the same quarter of any preceding year. It was really the first quarter that the arms trade with the

United States was arranged upon the basis of the new customs duties of the Dingley bill.

Formerly, large invoices of expensive guns and those of a fair price were exported from here to the American market. Now, very few double-barrel guns costing more than $5 are shipped, thus throwing the trade of the more expensive guns into the hands of our own gun makers. The new tariff has caused a radical change in the gun trade here and in the United States.

Since the Dingley tariff bill went into effect, thousands of steel barrels in the rough state have been exported from here to the United States to be there finished and mounted; which naturally increases the demand for skilled labor in the gun factories at home. At a meeting of the gun makers held in this city a few days since, it was stated that orders were already placed with them by American buyers for about 150,000 finished guns for the present year. The usual number of handmade Damascus barrels is supplied to a few gun makers, who produce a superior fowling piece. One manufacturer of arms in Liege exports about $100,000 of double guns to the United States, which are invoiced at about $4 a gun. The barrels of these guns are those of old muskets, converted into hunting guns. There are always in stock in Liege about 1,000,000 old military rifles, which have been discarded by different governments and bought by gun dealers in Belgium. The French Government has at present in the different arsenals of France about 2,000,000 "Gras" breechloaders and Chasepots transformed for the Gras cartridge, which are offered for sale at 97 cents. After being cleaned and put in perfect condition, they are sold here for $1.54. Many thousands were purchased at half price by the revolutionary committee in Athens during the late Greco-Turkish war. The Austrian "Wanzel" military breechloading rifle is sold by that Government for about 40 cents. These weapons are easily transformed into flintlocks and nipple guns for African tribes. The flintlocks are preferred, because powder can always be obtained by the natives, and nipple guns, in the absence of percussion caps, are useless to them. Ten years ago the trade in such guns was large; but at present, many of the ports being closed to the entry of firearms, the trade has fallen from 300,000 to 25,000 a year. These guns are exchanged with the natives for ivory, gold dust, rubber, etc.

Few Belgian revolvers are now exported to the United States. Manufacturers' price for five-shot is from 40 to 75 cents, according to model and caliber. Fine military revolvers sell for $8. I refer to wholesale prices, as this consulate has no connection with retailers.

The importation of American firearms into Belgium is small. Such Smith & Wesson and Colt revolvers, together with Winchester and Marlin rifles, as are received are generally intended for foreign orders, and are supplied and packed with other arms by the Liege gun dealers for shipment to destination.

The American revolver, being machine made, is conceded by Belgian makers to be superior in durability and accuracy of fire to any that can be produced here, where, with few exceptions, all parts of firearms are handmade. It is a house industry. Barrels, locks, and other parts of the gun are given to different workmen, who finish them at their homes or little shops. The gun maker then assembles the different parts and places the mounted gun on the market. The Belgian firearms trade with all countries is very extensive; in fact, Liege is the center in this line of goods.

Recently, a new feature in the trade has appeared in the purchase by Americans of large lots of old guns (including oriental guns which are sent here in exchange for modern ones), also old bayonets, yataghans, hangers, and the discarded helmets and cuirasses of Belgian cuirassiers. These are used for making trophies and other ornamentations.

Under date of April 1, 1898, Consul Gilbert calls attention to what appear to be errors in a report on firearms in Belgium by Consul Morris, of Ghent, published in CONSULAR REPORTS No. 210 (March, 1898), p. 428. In this report the value of exports of firearms to the United States in 1895 and 1896 is given as $242,483 and $258,005, respectively. Mr. Gilbert says that during the year 1895, firearms to the value of $515,041 were invoiced for the United States at the consulate at Liege, and during 1896 to the value of $563,207. He also transmits the following details:

In 1896, some 80,000 persons were employed in Belgium in the manufacture of firearms and parts thereof. Good hunting guns, double-barreled, are invoiced at $5 apiece; the most expensive guns cost $1,000 or more, but an excellent article can be purchased from the manufacturers at Liege for $30. The Flobert rifle is invoiced at from 82 cents to $1.05, with 2 per cent discount.

GLASSWARE.

On April 12, Consul Gilbert says:

The following statement shows the value of glassware exported from the consular district of Liege to the United States for the first quarters of the following years:

1895	$32,336.22
1896	29,183.35
1897	31,402.52
1898	20,094.84

Under the new tariff the exports of glassware from this consular district to the United States will, from present indications—orders being already booked—amount to about the same as in the past few years. No increase or decrease in this trade is anticipated. The glassware shipped from here to the United States is for table and ornamental uses.

WOOLEN GOODS.

The consul at Liege continues, under the same date:

The result of the Dingley tariff is demonstrated in the following statistics relative to the exportation of wool and woolen goods from the consular agency of Verviers to the United States for the first quarters of the years named.

1895	$256,310.06
1896	271,011.04
1897	317,092.32
1898	31,758.74

With the exception of billiard cloth, the export of woolen goods to the United States is thought to be practically ended. Verviers is the most important city in the wool industry on the continent of Europe.

ARSENIC.

The following, bearing date of April 14, has been received from Consul Gilbert, of Liege:

The first quarter of the year 1898 presents some new features in exports from this consular district. In many instances the augmentation is noticeable. In the year 1895 arsenic was exported to the United States to the value of $19,998.77. In 1896 the aggregate of such exports was $18,051.77. In the first two quarters of the year 1897 no arsenic was invoiced at this consulate, but during the last two quarters $29,225.14 worth of arsenic was forwarded to the United States. During the first quarter of 1898 the declared value of white arsenic at this consulate was $15,961.23.

ZINC DUST.

On April 15, Consul Gilbert writes:

Since the tariff bill of 1897, the exports of zinc dust collected at the several zinc works in Liege have largely increased. During the year 1896, the declared value of zinc dust for the American market was $35,826.66. In 1897 it amounted to $105,000.25. For the first quarter of 1897 such exports were $14,621.15; for the same quarter of 1898 the invoiced value was $28,456.95.

Zinc dust is employed in the United States for the manufacture of paints.

SWISS EXPORTS TO THE UNITED STATES.

When the Dingley tariff became a law, it was believed that it would result in seriously diminishing the exports to the United States from the eastern part of Switzerland. It was natural that the people here should feel anxiety concerning the effect of the new tariff, because the United States has sent into this consular district during the past ten years nearly $70,000,000 for laces, embroideries, etc., and this handsome sum has aided materially in the support of this industrious and worthy people. It now appears that their anxiety was unfounded. In spite of the fact that an increased duty of from 10 to 20 per cent was imposed by the new tariff upon most of the goods exported from this district to the United States, there has been a marked increase in the exports to our country.

Comparing the last six months of 1896 with the corresponding period of 1897, I find an increase of exports to the United States of about $200,000. It was thought by some, who believed that the new law would be destructive to the Swiss trade with the United States, that this increase was only an accident, but the gain continues, and would have been much greater but for the vigorous action of the customs authorities in an effort to collect all of the revenue that fairly belongs to the Government. This action has delayed shipments from this point, owing to the uncertainty that exists as to market value, and also as to how the term will be interpreted by the customs authorities.

During the quarter ended March 31, 1897, there were $1,408,073.76 worth of goods exported to the United States from this consular district, while during the quarter ended March 31, 1898, $1,508,442.37 worth was exported, making an increase of $100,368.61; and, had it not been for the difficulties above referred to, I am satisfied that the increase would have been fully $150,000 for the time named. The principal increase has been upon the following goods: Embroideries, $95,368.40; lace curtains, $15,692.65; laces (cotton and silk), $56,988.86. The decrease has been largely upon embroidered handkerchiefs, amounting to $49,350.

JAMES T. DUBOIS,
Consul-General.

ST. GALL, *April 1, 1898.*

GERMAN EXPORTS TO THE UNITED STATES.

I inclose a tabular statement showing the values of declared exports to the United States from the consular district of Frankfort and those of the consulates under supervision of this office for the quarter ended March 31, 1898, compared with the totals for the corresponding period of the previous year.

From—	First quarter—			
	1897.	1898.	Increase.	Decrease.
Frankfort	$1,312,563.08	$1,419,320.37	$106,757.29	
Aix la Chapelle	523,519.51	262,829.61		$260,689.90
Bamberg	140,005.69	111,378.44		28,627.25
Barmen	1,717,607.83	1,498,268.16		219,429.67
Cologne	490,371.14	386,323.88		104,047.26
Crefeld	766,265.16	435,213.28		331.051.88
Düsseldorf	304,841.97	199,268.96		105,573.01
Freiburg	477,794.04	365,214.90		112,579.14
Fürth	419,706.14	331,243.23		88,462.91
Kehl	256,156.80	390,577.42	134,420.62	
Mannheim	1,126,713.20	903,701.04		223,012.16
Mainz	628,299 11	473,751.62		154,547.49
Munich	194,218.50	100,202.21		94,016.29
Nuremberg	366,765.55	377,065.27	10,299.72	
Sonneberg	373,777.78	307,545.75		66,232.03
Stuttgart	282,414.13	216,425.84		65,988.29
Weimar	104,411.91	111,431.57	7,019.66	
Total	9,485,521.54	7,889,761.55		1,595,759.99

Résumé.

First quarter, 1894	$5, 114, 291. 59
First quarter, 1895	7, 969, 111. 29
First quarter, 1896	8, 431, 278. 85
First quarter, 1897	9, 485, 521. 84
First quarter, 1898	7, 889, 761. 55

FRANK H. MASON,
Consul-General.

FRANKFORT, *April 10, 1898.*

RUSSIA'S PART IN THE WORLD'S GRAIN TRADE.

Owing to a bad harvest of cereals in western Europe, the first three months of the present grain-trade season were very lively. Great demands from the countries of consumption and the high prices of cereals occasioned activity in the international market. The turnover at most of the exchanges exceeded the average autumn totals.

The following tables show the movement of the foreign trade in the principal countries during August, September, and October, 1897, compared with the same period of 1896:

Exports.

Exported from—	Wheat.	Wheat flour.	Rye.	Barley.	Oats.	Corn.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Russia:						
1897	1,199,106	......	399,402	589,878	149,976	55,098
1896	998,298	......	387,648	565,272	459,684	20,322
Austria-Hungary:						
1897	918	2,214	72	181,026	342	1,926
1896	16,074	3,132	126	238,662	198	4,896
United States:						
1897	1,562,904	329,796	57,636	125,676	299,376	970,362
1896	903,870	436,356	46,350	143,712	99,396	934,632
East Indies:						
1897	18,252	......	......	......	......	......
1896	16,506	......	......	......	......	......
Argentine:						
1897	9,198	6,174	......	......	......	44,136
1896	115,812	8,334	......	......	......	691,236
Great Britain:						
1897	3,384	5,562	......	......	......	......
1896	1,800	7,416	......	......	......	......
France:						
1897	142	6,534	90	6,282	576	468
1896	321	5,102	334	11,646	810	342
Italy:						
1897	198	2,934	18	3,996	334	2,610
1896	108	1,980	18	972	72	558
Spain:						
1897	4	12,762	......	......	......	2,340
1896	7	10,404	......	......	......	3,528
Germany:						
1897	50,292	51,552	40,014	8,874	4,806	5
1896	26,766	48,294	11,718	6,930	7,200	4
Belgium:						
1897	88,938	5,158	11,700	21,438	144	53,226
1896	73,260	2,520	7,434	13,158	594	35,676
Holland:						
1897	40,842	4,986	101,772	80,496	70,920	47,916
1896	255,420	2,844	90,252	92,736	84,582	59,964

Imports.

Imported to—	Wheat.	Wheat flour.	Rye.	Barley.	Oats.	Corn.
Great Britain:	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
1897	732,262	211,536	......	298,764	232,686	775,638
1896	905,544	297,864	......	341,910	284,904	877,122
France:						
1897	265,302	4,698	24,372	60,840	52,992	106,020
1896	44,928	6,444	54	32,760	72,756	80,172
Italy:						
1897	123,336	......	3,996	720	378	37,404
1896	114,516	......	1,386	......	90	36,990
Spain:						
1897	20,268	13	......	......	......	......
1896	57,780	54	......	......	......	......

Imports—Continued.

Imported to—	Wheat.	Wheat flour.	Rye.	Barley.	Oats.	Corn.
Austria-Hungary:	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
1897	56,754	1,152	79,200	16,920	7,920	64,692
1896	5,994	252	6,012	4,122	11,394	25,128
Germany:						
1897	358,794	9,504	262,386	312,894	167,670	306,792
1896	454,464	13,986	324,036	368,838	189,576	214,362
Belgium:						
1897	339,876	2,646	29,610	108,878	12,168	123,804
1896	359,658	3,636	9,828	76,194	14,850	112,356
Holland:						
1897	481,284	44,694	167,994	106,560	89,262	143,856
1896	352,890	33,030	166,554	125,496	113,940	138,618
Norway:						
1897	53,496	....	....	22,914	....	....
1896	62,658	....	....	23,274	....	....

The United States availed itself more than any other country of the increased demand for cereals, and its export of the same amounted to extraordinary proportions; especially in the month of October large quantities of wheat, oats, and corn were exported. Russia also increased her export of all cereals, except oats, which was hindered by a bad crop of all fodder cereals. But in Russia the export increased, not because farmers' supplies were greater, as was the case in America, but owing to the large stock on hand; and therefore toward the close of navigation the amount of cereals at the ports diminished greatly. In Russia the cereals of the last crop are always sold very slowly, as the farmers are never pleased with the prices of the current season and always hope for better ones toward spring. Owing to this fact, prices at the Russian markets are very stable, and in some cases are even higher than at the foreign exchanges. An interesting novelty of the season was the appearance of Siberian wheat at the foreign markets. Some twenty years ago, Siberian wheat was very well known abroad; it was exported principally to London, where, owing to its good quality, prices were comparatively high. Later, owing to the competition of wheat from European Russia and the trans-Atlantic countries, Siberian wheat disappeared little by little from the market. Last autumn, owing to the high prices of wheat and to the partial completion of the Siberian Railroad, Siberian wheat again appeared in Europe; but little of this went to London and St. Petersburg; the greater part was exported over the Red Sea, and considerable quantities went by rail to Austria and Hungary.

This season Austria-Hungary has changed from an exporting to an importing country; the import of all the cereals except barley exceeded the export. The import of wheat, rye, and maize was especially large. Of the other importing countries, important changes occurred in France and Germany. In the first, owing to a bad harvest, the import increased greatly. Thus, the import of wheat increased sixfold compared with the preceding year; the import of barley doubled, and 24,372 tons of rye were imported, whereas in 1896 the import of same amounted only to 54 tons. The rise in prices of cereals at the international market during last autumn was considerably influenced by the great demands in France. In Germany, on the contrary, the import was rather small, although the harvest in 1897 was not abundant; the reason being that the German Government prohibited her citizens from dealing in grain for future delivery. This excluded German grain from the influence of the international trade, and prices there did not follow those at the markets, and were lower than anywhere else. The dealers did not buy foreign grain, but increased the export of their own; thus, the export of wheat doubled, and that of rye increased three and one-half times. Such an abnormal state of the grain trade in Germany decreased the sales of other countries to Holland, where merchants formerly bought considerable quantities for the German markets. The import of grain into Spain and Norway has visibly decreased; Spain had a good local harvest, and Norway a fairly good one, as well as a considerable stock, which had accumulated from an increased import during the two preceding seasons.

Wheat played the principal part among the cereals of the last season, while the import of wheat flour decreased. Trade in oats, as before stated, was very quiet. The import of corn, however, increased. A few years ago corn was but little used in Europe, and now it occupies the second place in the grain trade.

The following table shows the part Russia took in the total export of cereals to the below-named importing countries:

Articles.	Great Britain.	France.	Italy.	Spain.	Austria-Hungary.	Germany.	Belgium.	Holland.
Wheat:	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
1897	26.9	38.6	98.4	86.4	41.8	67.8	12.6	64.1
1896	16.9	17.3	92.9	68.1	1.2	51	3.5	45.8
Wheat flour:								
1897	...	...	...	...	0.5	6.8	1.2	0.6
1896	...	...	...	...	0.7	4.5	0.7	2.6
Rye:								
1897	...	...	...	...	30	77.8	7.3	74.4
1896	...	...	...	...	55.1	79	23.8	61.9
Barley:								
1897	61.9	54.1	...	...	27.2	61	45.7	69.4
1896	50.6	31.6	...	...	25	47.2	16.4	61.6
Oats:								
1897	35.2	21.3	...	...	37.1	70	13.6	69.4
1896	37.5	26.4	...	...	14.2	82.9	9.5	89.9
Corn:								
1897	3.7	13.2	...	...	10.9	8	4.4	0.3
1896	2.2	2.3	...	...	22.9	6.1	1.2	0.8

Russia's export of wheat to all countries has increased, especially to Belgium and Austria-Hungary, owing mainly to the decrease of competition from Roumania, Servia, and Bulgaria (where the harvest was bad during 1897). The import from Servia into Austria-Hungary is encouraged by a special customs tariff. There was strong competition to Russia on the part of Canada, where the harvest was very abundant. Canada exported to Great Britain, during the three months, 99,000 tons, *i. e.*, half of the quantity of wheat exported from Russia. The conditions for rye in Russia were not as favorable as for wheat. The export rose, it is true, from 3,312 tons to 23,742 tons; but the shipments to Belgium decreased notably on account of United States competition. This is also beginning to be felt in Germany and Austria-Hungary. The export of barley from Russia has increased, owing to a bad harvest on the Balkan Peninsula and in Tunis. The export of oats from Russia fell from 459,000 tons to 149,400 tons. Russian oats were partly replaced by indian corn and partly by oats from the United States and Canada.

W. R. HOLLOWAY,
Consul-General.

ST. PETERSBURG, *April 12, 1898.*

BUTTER IN FOREIGN COUNTRIES.*

JAPAN.

There were imported into the port of Nagasaki during the year 1897, 33,884 pounds of butter, mostly from the United States and France. Small quantities were received from Australia, Denmark, Canada, and Holland. The butter is packed in tubs and tins; that in tubs is from the United States, each tub containing about sixty rolls of 2 pounds each, in brine. The tub butter is mostly used for cooking purposes, and retails now for 65 sen (32½ cents gold) per pound; the table butter comes in tins holding half a pound, 1 pound, and 2 pounds—the 1-pound package being the favorite. French tins are stained either red or gold, or a combination of the two colors. The names of the brand, the manufacturer, and the place where manufactured are also painted on the tin, thus giving the package a very bright and neat appearance; the soldering, too, is smoothly and nicely done.

A small amount of butter is imported in tins from the United States. The packages are the same size as the French, but are not as neat in appearance; the soldering is not as smooth, the tins are not stained, and they soon become rusty. The label of the manufacturer, being printed and pasted on the package, soon gets loose, and, if the package remains long on the shelves, it becomes covered with fly specks and dust, and its appearance prejudices the consumer. The result is that the package is sold for cooking purposes, and the dealer loses money. I find no complaint of the butter coming from the United States; objections are confined to the package.

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*These reports on butter are in answer to a request from a firm in New York. See CONSULAR REPORTS No. 211 (April, 1898), pp. 512 and 591. Advance Sheets of reports have been sent to inquirer.

From importers here, the two largest being Americans, I learn that not in five years have they lost or had to sell for cooking purposes a package of French table butter in tins. Consumers will not purchase any other than French butter for table purposes, if it can be had, as they know from long use that they can depend on its quality. The neatness of the package also, to a great extent, controls its sale; it must be pleasing to the eye before the consumer will even think of purchasing.

The favorite brands of French butter are those of Bretel Frères and J. Lapeltner. Pound packages sell for 75 to 80 sen (37½ to 40 cents gold). At present, the demand for fine table butter is from the foreign population almost exclusively, although a few Japanese buy the best article regularly. It is my opinion that the imports of butter into this port can be increased by educating the natives to its use, which can easily be done by reducing the price. The best French butter costs the importer in his store here 65 sen per pound, which is equal to 32½ cents gold.

There is no good reason why the butter makers of the United States should not control, to a great extent, the importation of fine table butter in Japan, as they now do the butter in tubs. To gain that control, the manufacturer must see that the butter and the package are "gilt-edge;" the standard must be kept up, and every precaution taken to hold the trade. The importers here are ready and willing to give United States butter the preference as soon as they are assured that they will have no trouble in selling the package.

CHARLES B. HARRIS,
NAGASAKI, *March 14, 1898.* *Consul.*

CHINA.

Probably most of the butter brought into Shanghai is from France. A considerable quantity comes from the United States, Denmark, and Germany. Some good American butter retailed last week at $1 Mexican (45 cents) per pound and found quick sale.

In 1896, butter to the value of 92,288 haikwan taels ($74,758) was imported into Shanghai, of which 7,522 haikwan taels' ($6,093) worth was reexported, and 9,945 haikwan taels' ($8,055) worth was shipped to other Chinese ports.

Butter is admitted free.

The Chinese use almost no butter. Foreigners in Shanghai have a natural prejudice in favor of the brands to which they have become accustomed, but American butter is gaining ground. It is folly to send poor butter to this market, and all shipments should be in hermetically sealed tins or jars. To allow a fair average to the retailer, so that he will find it to his interest to push our butter, it should be laid down here at about 25 cents gold per pound. I must reiterate one point—do not send poor butter. The journey and the climate are hard on butter, and the best in New York is poor enough by the time it is put on the table at Shanghai. The European and American consumers are willing to pay for a good thing.

I quote from memory a list of dealers in butter in Shanghai: Haukin & Co., Dunning & Co., Mundon & Co., Lane & Crawford, Gaillaud, Jeune, Nail & Holtz, Central Stores, Limited, G. Ching Chong.

JOHN GOODNOW,
SHANGHAI, *February 24, 1898.* *Consul-General.*

ITALY.

The importation of butter into Italy is not large. Exportation is regular and important, and throughout Italy and in the neighboring foreign countries the butter of Lombardy, generally known under the brand of "Milan," is famed for its quality and quantity.

The countries from which butter is imported into Italy were as follows in 1896:

Country.	Quantity.	
	Quintals.	*Pounds.*
Austria-Hungary	547	120,592
France	578	127,425
Germany	97	21,385
Holland	82	18,078
Switzerland	39	8,598
Denmark	26	5,732
Total	1,369	301,810

The price of butter is, of course, changeable, ranging from 2 to 2.50 lire (39 to 48 cents) per kilogram—that is, about 19 to 24 cents a pound.

The rate of duty on fresh butter is 12.50 lire ($2.41) per quintal, and on salted butter 17.50 lire ($3.38) per quintal.

According to the treaty with Austria-Hungary, there is an exception for butter imported from the Vertino Valley and passed through the customs at Casello, with original certificates by the proper authorities. Such butter is admitted into Italy at only 6.25 lire ($1.21) duty per quintal (220.46 pounds) on fresh butter and 8.75 lire ($1.69) per quintal on salt butter. However, this only holds good until 65 quintals (14,329 pounds) per annum have been imported.

WM. JARVIS,
Consul.

MILAN, *April 1, 1898.*

INSURANCE ON GOODS EN ROUTE FROM GUATEMALA.

I inclose copy of a circular issued by the Compania de Agencias de Puerto Barrios, concerning the insurance of goods afloat between the United States and this Republic.

A. M. BEAUPRÉ,
Consul-General.

GUATEMALA, *April 16, 1898.*

PUERTO BARRIOS, *April 6, 1898.*

Our New York correspondents advise us as follows:

"In view of the possibility of war between the United States and Spain, our bankers have absolutely refused to make advances on goods afloat, unless they are protected by war-insurance policies, this rule applying even to goods on neutral vessels, for the opinion seems to exist that goods under a neutral flag are liable to seizure by the enemy. Under the circumstances and with a view to protect the interests of our constituents against emergencies, we have thought it advisable to take out an open policy which covers—after arrival of the *Ardanrose*, now about due—cargo to us on all vessels or steamers which have sailed, but not arrived at the time war breaks out. On these the war premium is:

Description.	Neutral flag.	United States flag.
	Per cent.	*Per cent.*
Steamer	.0⅛	.0⅜
Sail	.0¼	.0¾

"Spanish flag can not be insured against war risk with our underwriters.

"On vessels or steamers sailing after war breaks out, other rates will be made, which we shall make known to you in due course."

Very respectfully,

COMPANIA DE AGENCIAS DE PUERTO BARRIOS, LTDA.
WM. F. FUQUA,
Agent.

HAITIAN LOAN NEGOTIATIONS.

In accordance with an official request made by the Secretary of State for Foreign Affairs of this Republic in a letter of the 19th instant, I inclose a certified copy of a law passed by the last Legislature of this Republic* for the purpose of negotiating a loan in the United States and for retiring the paper money, together with a copy of his letter requesting the same.

JOHN B. TERRES,
Vice-Consul-General.

PORT AU PRINCE, *February 22, 1898.*

SECRETARY OF STATE FOR FOREIGN AFFAIRS,
Port au Prince, February 19, 1898.

MR. VICE-CONSUL-GENERAL: I have the honor to address to you a law, with translation in English, passed by the last Legislature of the Republic, authorizing the Government of Haiti to negotiate a loan of $3,500,000, the amount to be raised for the purpose of retiring the paper money which is now in circulation in the Republic of Haiti. The important relations existing between the two Governments have decided the Haitian Government to contract this loan in the American market, and I pray you to have the kindness to transmit on the first occasion to the Department of State at Washington the two documents which I have requested you to certify. You will please at the same time inform officially the United States Government that our minister plenipotentiary at Washington, Mr. J. N. Leger, is charged to effect this loan.

You will accept, Mr. Vice-Consul-General, the assurance of my high consideration.

BRUTUS ST. VICTOR.

Tiresias Augustin Simon Sam, President of Haiti, according to the right of the initiative which article 69 of the constitution confers on him—

Whereas the best encouragement to national trade in the present situation is to insure regularity and stability in its transactions, stopping as much as possible fluctuation of exchange;

Whereas it is of importance to secure the savings of the nation against depreciation of currency;

Whereas the unification of our monetary system on the basis of the gold standard is recognized as indispensable;

Whereas the withdrawal of the paper money becomes an urgent measure of public necessity;

Whereas the value allowed to the national silver money makes it fiduciary and conventional coin, of a nature to trouble commerce and exchange, and it is necessary to withdraw said silver coin now in circulation, consisting of pieces of 50, of 20, and of 10 cents;

Whereas the same reasons command the withdrawal of part of the bronze money likewise in circulation;

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* See CONSULAR REPORTS No. 206 (November, 1897), p. 453.

On the report of the Secretary of State of Finance, and by the advice of the council of the secretaries of state—
has proposed, and the Legislative Body has voted, the following law:

TITLE I—OF THE LOAN.

ARTICLE 1. The Government is authorized to contract on the credit of the Republic a loan of $3,500,000 in United States gold dollars, at par, and on a basis of interest which shall never under any circumstances surpass 9 per cent per annum.

ART. 2. The loan contract, of which the conditions must conform to the prescriptions of the present law, and all documents concerning the same, will be published in the official journal of the Republic by the Department of Finance immediately after the conclusion of the loan.

ART. 3. In order to facilitate the control of the operations of the loan and of the withdrawal, a commission of nine members is created, composed of three senators, three deputies, and three Haitian merchants. The three senators and the three deputies will be chosen by the President of the Republic from a list of six candidates, furnished by each of the two chambers. The three merchants will be named by the President. This commission will meet at the Department of Finance, under the presidency of the chief of this Department. Deliberation will be held with a majority of two-thirds of the members, and their decision will be taken as absolute majority. In case of division, the president's voice will prevail.

ART. 4. The commission created by the preceding article will take the title of "control commission." As soon as the loan is definitely concluded, the authority of the commission will extend to all the operations to which the present law applies. The seat of the commission will be at the office of the National Bank of Haiti, and the president will be chosen by the members.

ART. 5. The entire sum borrowed shall be paid at the National Bank of Haiti in gold coin of the United States of America, verified and counted in presence of the control commission, and deposited to the account of the bank.

ART. 6. The commission, on the arrival of the loan funds, will be immediately convened by the Secretary of Finance, who will submit the invoices, bills of lading, manifest, and all documents concerning the matter to the members. The commission will meet at the national bank, and, after having verified the documents in question and ascertained the truth of the sums indicated, will make a report, which will be signed by the members present, as well as by the directors and cashier of the bank. This report will be made out in triplicate and sent to the office of the Secretary of Finance, to the chamber of accounts, and to the national bank. It will be published afterwards in the Moniteur by the Secretary of Finance.

ART. 7. The loan, which is to be made in the best interests of the Government, will serve to effect the withdrawal—

(1) Of all the paper money issued and actually in circulation—that is to say, $3,798,134.

(2) Of all the national silver coin of 1 gourde coined from 1881 to 1895—say, $1,000,000.

(3) Of all the smaller coin of 0.50 gourde—say, 1,046,961 gourdes.

The metallic pieces of 20 centimes and 10 centimes will be withdrawn from circulation, as is stipulated in article 22.

ART. 8. In no case and for no reason can the funds of the loan be employed for any purpose other than that prescribed by preceding article 7. Any use made of these funds for purposes foreign to that which the present law assigns shall be liable not only to the penalties established by article 119 of the constitution, but also to those provided by the general laws of the Republic, without prejudice to action for restitution of the sums illegally spent.

ART. 9. There is specially ordered for the redemption of capital and for the service of the loan interests, a surtax of 25 per cent on all the import duties collected. This surtax, which will be paid in gold money of the United States of America, will be collected from the day of the publication in the Moniteur of the report of the commission of control, declaring that arrangements for the loan have been made.

ART. 10. The proceeds of this surtax will be placed in the National Bank of Haiti to the credit of the lenders, until the complete payment of the loan, capital, and interest.

ART. 11. The collecting of the surtax will be the object of a special account in the financial administration of the Republic and in the National Bank of Haiti; and on the first day of each month, a note of the Secretary of Finance inserted in the Journal Officiel will announce the amount deposited in the national bank during the preceding month, not only in the principal bank in Port au Prince, but in the branch establishments in other towns.

ART. 12. It is formally forbidden to divert from its destination the surtax of 25 per cent appropriated for the reimbursement of the loan, under the penalties declared by the preceding article 8.

ART. 13. The lenders, if they deem proper, may superintend the depositing of the surtax at the national bank. The special Government commission at the bank is bound to help them, and to interpose in their favor whenever they may require its services. But the right to establish a direct and permanent control over the customs of the Republic can, under no conditions, be granted.

ART. 14. The interest will be paid every six months, and computed on the last remaining balance. The redemption will take place every six months, and will include all the sums obtained from the surtax, during the preceding six months, at that time in the safe of the bank, after deducting the interest.

ART. 15. It will be optional with the Government, which formally reserves the right to the loan contract, to redeem at any time the loan authorized by the present law, or to redeem it by anticipated payments made at other times than those fixed by the preceding article and by other resources than those produced by the surtax.

ART. 16. Until the loan is entirely paid, all payments made on the interest and for redemption of the capital borrowed will be published in the Journal Officiel.

ART. 17. As soon as the loan is completely paid, which will be announced by a notice published in the Moniteur, the collection of the surtax of 25 per cent will legally cease. All payments of this surtax made after the redemption of the loan will be refunded by the Government, and the officials who order them, as well as those who collect them, whatever may be their title, may be prosecuted as extortioners, without prejudice to action for damages by the parties interested.

TITLE II—OF THE WITHDRAWAL.

ART. 18. The withdrawal of the paper money and national silver pieces destined to be removed from circulation by means of the loan will commence immediately after the realization thereof and the execution of the formalities of publicity required by articles 2 and 6 of the present law.

ART. 19. An order of the President of Haiti, inserted in the Moniteur, published and posted in all the communes of the Republic by the Secretary of Finance, will announce the beginning of the withdrawal and will invite the holders of said coins to present them for exchange.

ART. 20. The paper money issued according to the law of September 19, 1892, and the metallic pieces of 1 gourde and of 50 centimes shall be, with the proceeds of the loan, reimbursed in gold at 50 per cent premium. In consequence, each gourde shall be reckoned in exchange as 66 cents, or two-thirds of a gold dollar. The national metallic pieces of 10 and 20 centimes, until they are in turn withdrawn from circulation, shall be employed as a balance in these reimbursements at 50 per cent premium, up to the amount of 4 gourdes in each payment. The bronze money shall also be employed up to the amount of 10 centimes per payment. The exchange of bank notes and of metallic coin must be finished within one year, at the latest, from the completion of the loan. This exchange will be made by the National Bank of Haiti on its own responsibility at the principal house in Port au Prince, and in the other towns at the branches and agencies of the bank.

ART. 21. The manner of executing the exchange of the paper money will be fixed by an order of the President of the Republic. It will be made in the form indicated by articles 9, 10, 11, 12, 13, and 14 of the resolution of December 16, 1892, concerning the withdrawal of, and the substitution for, paper money. The same formalities will be prescribed for the exchange of the metallic silver coin, account being kept of the difference which exists between this coin and the paper money.

ART. 22. The paper money withdrawn from circulation will be, under the direction of the commission of control, verified, canceled, perforated, and burned. The burning will take place publicly on the first Monday (or on the next day if this Monday is a holiday) of each month, in the afternoon, under the management of the director of the bank, with the supervision and control of the commission, and in the presence of the Chief Administrator of Finance, the Government Commissioner, the justice of the peace of the north section, the municipal magistrate, and the commandant of the town and commune of Port au Prince. The report of this action will be made out immediately in triplicate and signed by all the authorities present. A duplicate will be sent to the Secretary of Finance, another to the control commission, and a third to the national bank, to be used as a release. This report will be, besides, published immediately in the Moniteur by the Department of Finance.

ART. 23. Every month, a detailed advertisement inserted in the Journal Officiel by the Secretary of Finance will announce the amount of paper and metallic pieces withdrawn from circulation during the preceding month. An extract of the communication had on this subject with the national bank will be sent to the Chamber of Accounts, after having been duly examined by the control commission.

ART. 24. The national silver pieces of 1 gourde and of 50 centimes, in proportion as they are withdrawn under the responsibility of the bank, will be accumulated in the safes of the principal house in Port au Prince, to be sent to the United States of America and changed into new coins of 50, 25, and 10 cents. These coins will be made at the standard of eight hundred and thirty-five thousandths of pure silver and one hundred and thirty-five thousandths alloy, with the same weights, allowance, and diameter as the metallic pieces of the same value of the United States of America. They will bear on one side the arms of the Republic, with the words "Liberté, Egalité, Fraternité, République d'Haiti" below, and a statement of the value of each piece; and on the other side, the effigy of the goddess of liberty, with the name of the coin and the date of the fabrication below.

ART. 25. The sum total of the coinage will be 2,000,000 gourdes. Of this sum 300,000 gourdes ($300,000) will be coined in pieces of 50 cents, 700,000 gourdes ($700,000) in pieces of 25 cents, and 1,000,000 gourdes ($1,000,000) in pieces of 10 cents.

ART. 26. Should the result of the coinage, either on account of the amount sent or on account of the standard of nine hundred thousandths for pieces of 1 gourde, give a balance in silver metal in favor of the Government, the surplus will be, under the direction of the National Bank of Haiti, changed into American gold money for the account of the Republic and employed in the payment of all or part of the expenses of the coinage.

ART. 27. The National Bank of Haiti, which has charge of sending to the United States the matallic pieces of 1 gourde and of 50 centimes, as stated in article 24, will receive directly, and place to the credit of the Government, the new pieces of 50, 25, and 10 cents.

ART. 28. As these coins arrive, the commission of control, upon notification by the Secretary of Finance, will meet at the national bank and assist at the verification of the packages which contain them. A report stating the quantity of silver pieces received will be made at every verification. A duplicate will be sent to the Secretary of Finance, another to the commission of control, and a third to the national bank. After each verification, these reports will be published in the Moniteur by the Department of Finance.

ART. 29. As the pieces of the new coinage arrive, the withdrawal at 50 per cent premium of the metallic pieces of 20 and of 10 centimes now in circulation will be instituted. This withdrawal will be carried on by the national bank under the same conditions of supervision, of verification, and of publicity prescribed by articles 21 and 23 preceding.

ART. 30. The pieces of 20 and 10 centimes retired from circulation will be, under the supervision of the commission, sent abroad by the national bank to be sold for American gold. The net proceeds of these sales, after having been, at the time they were deposited in bank, submitted to the conditions of control and publicity required by article 28, will be applied (1) to reimburse, always at 50 per cent premium, the balance of the 1 gourde and 50 centime pieces; (2) to withdraw from circulation, at the same rate as the other coins, a sum of 100,000 gourdes in bronze coin of the last issue, and all the copper money coined under the governments of Boyer, Riché, Soulouque, and Geffrard; (3) to pay all the expenses of the loan, of the withdrawal, and of the coinage. The balance of the proceeds of said sales, if there is any, will remain on deposit at the National Bank of Haiti, and will constitute a reserve for the treasury, which it is forbidden to touch without express authorization of the Legislative Body.

ART. 31. The copper coin withdrawn from circulation will likewise remain on deposit in the national bank, and can never be restored to circulation without a resolution of the legislative chambers, necessitated by the insufficiency of current money and an imperious need of exchange.

ART. 32. The commission created by article 3 of the present law will exercise control not only over the transactions of the loan and withdrawal, but also over everything which directly or indirectly concerns these operations. It will be established as soon as the withdrawal begins. All the books, papers, printed matter, and things necessary for the work of the commission will be furnished by the national bank, at the Government's expense. A certain number of employees will be placed at its disposal to care for the accounts, and to transact all the duties of the service. These employees will be chosen by the commission and paid from the public treasury. Their number and their salary will be determined by the commission and the Secretary of Finance.

ART. 33. The functions of the control commission correspond partly to those of the Secretary of Finance and partly to those of the national bank.

ART. 34. No sum can be taken from the coffers of the National Bank of Haiti, whether at Port au Prince or in the other towns, to be employed in the withdrawal, without a positive order from the commission. This latter will control especially the expedition of the silver coins destined to be recoined or sold (which coins will be previously verified), and also the admission of the notes produced by the sales or by the new coinage.

ART. 35. The commission will present, at the end of its work, a circumstantial report to the Secretary of Finance.

ART. 36. No foreign silver money will have legal circulation in the Republic after the beginning of the redemption. The importation of said coins, of whatever nature or country, is formally forbidden. Any violation of this law will involve the confiscation of the value imported and the condemnation of the transgressor to a fine equal to the sum confiscated.

ART. 37. The national bank will assume all the expenses of the redemption, classification, and burning of the paper money, as well as those covering the withdrawal and sale of the silver money taken from circulation, and of all the expenses necessary to these operations. The commission will appropriate from the amount withdrawn from circulation (the premium of 50 per cent being deducted) a percentage of ——— to be paid once, which it is authorized to take, after the withdrawal from the first funds arising from the sale of the metallic pieces of 10 and 20 centimes prescribed by article 30. In case of misunderstanding between the Government and the bank concerning the percentage to be granted the latter, the Government will provide means to insure the execution of the present law and will name, if necessary, in the chief towns of the Republic, commissions which will be charged with the withdrawal, and will be paid from the public treasury.

ART. 38. As soon as the withdrawal of the paper money and the national silver coin takes place, the gold coin of the United States of America will be legal tender in the Republic, and all the custom-house duties and other revenues of the State will be collected in the same money. The new metallic pieces of 50, 25, and 10 cents will be received as a balance to the amount of 5 gourdes for each payment. The bronze coin will only be admitted up to 50 cents for each payment.

ART. 39. No one shall be bound to receive in the same payment, in silver coin or bronze, a sum exceeding that fixed by the preceding article. Nevertheless, the Government is under obligation to accept the payment of 10 per cent of import duties in small coins of 50, 25, and 10 cents.

ART. 40. The obligations contracted in national money before the withdrawal, of whatever nature they may be and for whatever cause, will be paid in American gold at the rate, 50 per cent premium, adopted for the withdrawal. The same rule applies to all debts of the State and of the communes contracted in national money, the consolidation of which has not been ordered, or a special mode of settlement of which has not been determined, by existing laws or by agreement of the parties.

ART. 41. The Secretary of Finance will render account to the chambers, at the opening of the legislative session, of the operations of the loan, of the withdrawal, of the coinage, and, in general, of all the operations ordered by the present law. No release whatever shall be given to the Secretary of Finance, if he does not execute strictly the preceding provisions. It will be the same with the other secretaries of state, if measures are discussed in the council of the secretaries of state tending to violate the provisions of the present law.

ART. 42. All decisions made and all acts performed not in accordance with the present law are null and void. Debts contracted under these conditions do not bind the Republic. They are personal obligations for those who have contracted them.

ART. 43. The present law abrogates all laws or provisions of laws which are opposed thereto.

It will be printed and executed under the direction of the Secretary of Finance.

* * * * * * *

In the name of the Republic, the President of Haiti orders that the above law of the Legislative Body shall be invested with the seal of the Republic, printed, published, and executed.

Given in the national palace at Port au Prince, the 21st of December, 1897, anno ninety-fourth of the independence.

TIRESIAS AUGUSTIN SIMON SAM.

A GERMAN VIEW OF THE AMERICAN CONSULAR SERVICE.

I inclose copy and translation of a letter issued by the Association of German Bicycle Manufacturers, in which attention is called to the activity displayed by our consuls in introducing American goods into foreign countries. This is as foreigners see us and quite in contrast with the complaints sometimes made by those who think that the consular service is not what it ought to be. But the circular speaks for itself. For the copy, I am indebted to Mr. Eugene Germain, vice and deputy consul.

A. LIEBERKNECHT,
Consul.

ZURICH, *April 14, 1898.*

ASSOCIATION OF GERMAN BICYCLE MANUFACTURERS,
OFFICE OF THE PRESIDENT,
DRESDEN.

MR. BRUNO NAUMANN,
Privy Commercial Councilor:

We take the liberty to bring a matter to your attention which we believe deserves your notice and consideration.

It is a well-known fact that American consuls display at all times great activity and energy in developing foreign trade and opening new markets for the products of American industry. To these well-applied consular efforts is due the success with which American manufacturers have been enabled to introduce bicycles in such large quantities into Germany, thereby flooding our markets. It is especially well known that the American consul stationed at Frankfort is and has been doing everything in his power to introduce American bicycles into Germany, and to his persistent effort is mainly due the foothold they have obtained in that country.

Not only in Germany is the activity of the American consuls noticeable, but in all countries of the world they display great energy in promoting the commercial interests of their country. Our East Indian correspondent informs us that the same activity prevails there.

It has, therefore, occurred to us that by a joint movement we might induce the authorities to take the proper steps to cause our German consuls to work in the same manner as their American colleagues.

We, of course, do not know whether a movement inaugurated by our association would effect the desired results, being ignorant in regard to the duties devolving upon German consuls; nor have we studied ways by which this object might be reached; but, having observed the zeal and activity displayed by American consuls, we have decided to submit the above to your opinion.

It is a well-known fact that German consuls could be more useful to the industrial interests of their country, and it is also an established fact that these officers take the attitude that any attention to commercial affairs is in no way part of their duty.

We had occasion recently to ask one of our consuls for certain information. In his reply, covering several pages, he did not give us the information desired, but referred us to an attorney of his acquaintance, to whom, he said, we might write in German.

We shall be pleased to hear from you on this subject, and to learn if you think it worth while to promulgate our idea with a view to taking concerted action.

Most respectfully,

[Signature omitted],
Dresden.

HONORED MEMBERS: The above letter, sent me by one of our members, is herewith submitted for your consideration. I intend in due time to bring the matter to the attention of our German Department of Foreign Affairs, and would ask you to give me your opinion, together with any further information you may have in this matter, to serve me as guidance.

Most respectfully,

BRUNO NAUMANN,
President.

THE PHILIPPINE ISLANDS.*

Local and European authorities estimate the area of the Philippine Islands at 150,000 square miles, and their population at from 8,000,000 to 10,000,000. The island of Luzon, on which the city of Manila is situated, is larger than New York and Massachusetts, and has a population of 5,000,000; and the island of Mindanao is nearly, if not quite, as large. There are scores of other islands, large and very populous. An idea of the extent of the Philippines may be formed when it is stated that the six New England States, New York, New Jersey, Maryland, and Delaware have 10 per cent less area. In addition to the Philippine Islands, the Caroline, Ladrone, and Sooloo groups are considered under the jurisdiction of this consulate (Manila). I have received a petition requesting that a consular agency be established at Yap, in the Caroline group.

In all, there are about two thousand islands in a land and sea area of about 1,200 miles of latitude and 2,400 miles of longitude.

EXPORTS.

During the quarter ended December 31, 1897, there were exported from these islands to the United States and Great Britain 216,898 bales of hemp (280 pounds per bale), of which 138,792 bales went to the United States and only 78,106 bales to Great Britain. During the year 1897 there was an increase in the export of hemp from the Philippines to continental Europe of 19,741 bales; to Australia, 2,192 bales; to China, 28 bales; to Japan, 2,628 bales; and to the United States, 133,896 bales—a total increase of 158,485 bales, while to Great Britain there was a decrease of 22,348 bales.

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*This report is to appear in the forthcoming edition of Commercial Relations, 1896–97, but is printed now on account of the general demand for information.

Thus, of increased shipments from the Philippines, those to the United States were 544 per cent greater than to all other countries combined.

Of the total exports of hemp from the Philippines for the ten years ended 1897, amounting to 6,528,965 bales (914,055 tons), 41 per cent went to the United States.

During the same years the Philippine Islands exported to the United States and to Europe 1,582,904 tons of sugar, of which 875,150 tons went to the United States, 666,391 tons to Great Britain, and 41,362 tons to continental Europe; showing that of the total exports more than 55 per cent went to the United States.

At the current values in New York of hemp (4 cents per pound) and of raw sugar (3⅜ cents per pound), the exports of these two products alone from these islands to the United States, during the ten years under review, amounted to $89,263,722.80, or an average of nearly $8,926,372[*] per year.

Data as to cigars, tobacco, copra, woods, hides, shells, indigo, coffee, etc., are not now obtainable; but a conservative estimate would so raise the above figures as to show United States imports from these islands to average about $1,000,000 per month. To-day, I have authenticated invoices for export to United States amounting to $138,066.12.

Later, I will write of the Philippine tariff, import and export, being now engaged in translating it into English. The export duties and charges here on the hemp and sugar exported to the United States, during the ten years ended with 1897, amounted to $5,172,994.87.

It is, from the above, very apparent that the trend of trade is toward the United States, and my best endeavors will be exerted for its further extension.

There are here twenty-two consulates representing the several countries, but the volume of the export trade coming under my official supervision equals that of my twenty-one colleagues combined.

OSCAR F. WILLIAMS,

MANILA, *February 28, 1898.* *Consul.*

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[*] According to the returns of the Bureau of Statistics, Treasury Department, the annual imports into the United States from the Philippine Islands amounted to $74,150,284 during the ten years ended June 30, 1897, or $7,415,028 per year. For the seven years ended with 1894, the imports averaged $8,564,611 per year, but for the last three years the imports fell off nearly one-half, amounting to only $4,731,366, $4,982,857, and $4,383,740, in 1895, 1896, and 1897, respectively.

Statement of the principal exports from Manila, Cebu, and Iloilo from January 1 to December 31, 1897.

Produce.	Great Britain.	United States* and Canada.	Continent of Europe.	Australia.	China, etc.	Japan.	California.	Total, 1897.	Same period, 1896.	Increase.	Decrease.
Sugar:											
Manila—											
Dry..........piculs†	22,400	13,773	28,862	......	593,839	82,655	......	741,429	1,242,814	......	645,163
Wet..........do	161,468	......	......	......	15,117	......	......	176,585	320,463		
Cebu—											
Dry..........do	78,880	......	......	......	81,800	84,510	......	245,190	119,756	123,882	......
Wet..........do	1,920	......	......	......	......	......	......	1,920	3,472		
Iloilo—											
Dry..........do	534,880	328,767	......	......	733,860	469,279	......	2,066,786	1,979,519	82,267	......
Wet..........do	......	......	......	......	......	......	......	......	5,000		
Total..........do	799,548	342,540	28,862	......	1,424,616	636,444	......	3,232,010	3,671,024	......	439,014
Hemp:											
Manila..........bales	356,382	366,002	22,373	19,080	19,077	14,653	24,200	821,767	665,375	156,392	......
Cebu..........do	28,800	51,471	......	......	......	......	......	80,271	100,518	......	20,247
Total..........do	385,182	417,473	22,373	19,080	19,077	14,653	24,200	902,038	765,893	136,145	......
Coffee..........tons	......	......	119	......	17		......	136	89	47	......
Cordage..........piculs	......	......	11	......	3,819		......	3,830	3,104	726	......
Sapan wood:											
Manila..........do	......	......	......	......	16,350		......	16,350	12,930	10,820	......
Iloilo..........do	......	......	......	......	51,300		......	51,300	43,900		
Buffalo hides and cuttings..........do	......	300	......	......	11,340		......	11,640	6,360	5,280	......
Copra:											
Manila..........do	11,200	......	752,470	......	1,353		......	765,023	558,329	203,908	......
Cebu..........do	46,414	......	......	......	......		......	46,414	49,200		
Mother-of-pearl shell..........do	246	......	136	......	297		......	679	204	475	......
Gum mastic..........do	1,910	......	......	......	1,654		......	3,564	2,758	806	......
Indigo..........quintals	526	......	......	......	127		......	653	462	191	......
Tobacco, leaf..........do	37,008	......	253,341	12	26,351		......	316,712	219,729	96,983	......
Cigars..........mil	23,090	2,110	34,321	15,550	81,670		175	156,916	183,667	......	26,751

* Atlantic ports.

† 1 picul=140 pounds.

Increase and decrease of principal exports by countries.

Articles.	Great Britain.	United States, Atlantic ports, and Canada.	Continent of Europe.	Australia.	China, etc.	Japan.	California.
Sugar:							
Dry—							
Increase......piculs...	13,120				387,765	300,903	
Decrease.......do......		963,288	27,084				
Wet—							
Decrease.......do......	114,828				18,742	16,860	
Coffee:							
Increase..............tons...			48				
Decrease..............do......					1		
Cordage:							
Increase...........piculs...					749		
Decrease.............do......			23				
Hemp:							
Increase.............bales...		127,146	19,741	2,192	28	2,628	6,750
Decrease.............do......	22,340						
Indigo:							
Increase.........quintals...	526						
Decrease ....do......					335		
Copra:							
Increase...........piculs...	8,414		198,358				
Decrease.............do......					2,864		

Comparative exports of hemp and sugar to Great Britain, the United States, and Europe.

Year.	Sugar.				Hemp.			
	Great Britain.	United States.	Continent of Europe.	Total.	Great Britain.	United States.	Continent of Europe.	Total.
	Piculs.	*Piculs.*	*Piculs.*	*Piculs.*	*Bales.*	*Bales.*	*Bales.*	*Bales.*
1888	562,478	1,353,820	74,065	1,990,363	347,854	246,437	2,861	597,152
1889	773,773	2,135,443	81,948	2,991,164	322,022	199,707	1,239	522,968
1890	640,656	997,851	62,823	1,701,330	341,993	109,726	1,968	453,687
1891	731,507	1,604,072	37,394	2,372,973	443,142	132,267	4,206	579,615
1892	1,181,392	1,505,872	48,512	2,735,776	357,744	384,076	3,354	745,174
1893	1,577,155	1,291,421	69,526	2,938,102	373,041	212,463	3,548	589,052
1894	978,719	910,155	68,666	1,957,540	335,372	387,045	11,691	734,108
1895	1,373,433	1,055,237	63,149	2,491,819	493,801	273,918	3,981	771,700
1896	901,256	1,305,828	55,946	2,263,030	407,522	290,327	2,632	700,481
1897	799,548	342,540	28,862	1,170,950	385,182	417,473	22,373	825,028

Clearances from Manila, Cebu, and Iloilo from October 1 to December 31, 1897.

Vessel.	From—	Destination of produce.	Sugar.		Hemp.	Cigars.	Copra.
			Dry.	Wet.			
To the United Kingdom.			*Tons.*	*Tons.*	*Bales.*	*Mil.*	*Tons.*
Esmeralda	Manila	Liverpool			2,724	300	
Bidston Hill	do	London			17,030		
Zafiro	do	United Kingdom			526	40	
Oopack	Cebu	do	2,850				
Vortigern	Manila	Liverpool		2,224	1,920		700
Sungkiang	do	United Kingdom			4,950		
Yuensang	do	do			2,250		
Vortigern	Cebu	do			5,020		37
Esmeralda	Manila	do			1,500		
Zafiro	do	do			650	330	
I. de Luzon	do	do	114		1,500	2,390	
Sungkiang	do	do			4,500	80	
Oolong	Iloilo	Liverpool	4,750				
Esmeralda	Manila	London			150		
Sungkiang	do	United Kingdom			1,000	790	
Kintuck	do	London and Liverpool			11,850	20	
Covadonga	do	do	41			1,820	
Zafiro	do	do			1,150	40	
Dundale	do	do			7,752		
Yuensang	do	do			250	20	
Esmeralda	do	do			500	40	
Sungkiang	do	United Kingdom			2,310	330	
Zafiro	do	Liverpool			250	1,270	
Velox	Cebu	do	130		3,250		188
Clara	Manila	London			7,074		
Leon XIII	do	Liverpool					
To the United States and Canada.							
Onaway	Manila	Delaware Breakwater (for orders).			5,916		
Josephus	do	New York			9,374		
Kate F. Troop	do	Delaware Breakwater (for orders).			7,270		
Strathisla	do	New York			8,400		
William H. Connor	do	do			9,419		
Ancyra	do	do			16,300		
Paul Rivere	do	Delaware Breakwater (for orders).			10,445		
E. A. O'Brien	Cebu	Boston			14,000		
St. John	Manila	Delaware Breakwater (for orders).			12,093		
Strathern	do	New York			8,664		
L. Schepp	do	Philadelphia			11,210		
Savona	do	Delaware Breakwater (for orders).			10,284		
Obed Baxter	do	do			5,400		
Paramita	do	New York			10,017		

The following statement of the general trade of the Philippine Islands is taken from Review of the World's Commerce, 1896–97, shortly to be published by the Bureau of Foreign Commerce.

According to a British Foreign Office report (No. 1932, annual series, 1897), the total imports into the islands in 1896 were valued at $10,631,250 and the exports at $20,175,000. The trade with several of the most important countries (compiled from the respective official statistics) was:

Country.	Imports.	Exports.
Great Britain	$2,467,090	$7,467,500
Germany	744,928	223,700
France	1,794,900	1,987,900
Belgium	272,240	45,660
United States	162,446	4,982,857
China	103,680	13,770
Japan *	98,782	1,387,909

* In 1897.

About 13 per cent of the imports, says the Statesman's Year Book, come from Spain. Three-fifths of the imports from Great Britain consist of cotton manufactures and yarn.

Details of trade with the United States during the last two years are given by the United States Treasury as follows:

Articles.	1896.		1897.	
	Quantity.	Value.	Quantity.	Value.
Imports.				
Hemp, manila ... tons	35,584	$2,499,494	38,533	$2,701,651
Cane sugar (not above No. 16) ... pounds	142,075,344	2,270,902	72,463,577	1,199,202
Fiber, vegetable, not hemp, ... tons	872	68,838	5,450	384,155
Fiber, vegetable, manufactures of		26,428		22,170
Straw, manufactures of		81,352		72,137
Tobacco ... pounds	1,280	808	2,745	2,338
Miscellaneous		35,035		1,087
Total		4,982,857		4,383,740
Exports.				
Cotton, manufactures of		9,714		2,164
Oils, mineral, refined ... gallons	1,130,769	89,958	600,837	45,908
Varnish ... do	1,138	1,500	2,483	2,239
All other		61,274		44,286
Total		162,446		94,597

It should be noted that our trade is really much larger (especially in the item of exports to the islands) than is indicated by the above figures. Large quantities of provisions (flour, canned goods, etc.) are sent to Hongkong or other ports for transshipment, and are credited to those ports instead of to Manila.

In a report published in Special Consular Reports Highways of Commerce, Consul Elliott, of Manila, says that there is but one railway in the islands—from Manila to Dagupin—a distance of 123 miles. It is single track and well built, steel rails being used its entire length, the bridges being of stone or iron, and the station buildings substantial. English engines are used which make 45 miles per hour. The Government assisted in the construction of the road by making valuable concessions of land with right of way its entire length, and by guaranteeing 8 per cent per year upon the stock of the road for a period of ninety-nine years, when it is to become State property. So far, adds the consul, the road has paid more than 10 per cent per annum to shareholders.

Mr. Elliott also states that the Compañia Transatlántica (Manila–Liverpool) maintains a monthly service to Europe; that there are four lines of steamers to Hongkong, and many local lines plying between Manila and the provinces, the largest having twenty-eight steamers of 25,000 tonnage.

CONSULAR REPORTS No. 203 (August, 1897) quotes from a report published in the Bulletin de la Société de Géographie Commerciale (Paris, 1897, Vol. XIX, No. 4), the following description of the industrial condition of the Philippine Islands:

> There are about 25,000 Europeans resident in the islands (the total population is nearly 8,000,000), of course, not counting the troops. Some 12,000 are established in the capital, Manila, the center of the colonial government. English, Spanish, and German houses are engaged in trade, advancing money to the natives on their crops. Such business methods involve risks and necessitate large capital in the beginning, but the profits are immense. The land is fertile and productive, and lacks only intelligent cultivation. Abaca (manila hemp) is one of the chief sources of wealth of the country. Sugar cane does not give as satisfactory returns, owing largely to the ignorance of planters. The average production is 178,000,000 kilograms (175,186.96 tons), while that of Cuba is equal to 720,000,000 kilograms. The sugar goes almost entirely to Japan, England, and the United States. It is of poor quality and very cheap. The cultivation of tobacco is one of the most important industries, although it is capable of much greater development. The native coffee, although not equal to the mocha or bourbon varieties, has a fine aroma. It goes chiefly to Spain. Cocoa trees grow in abundance, and the oil is used for lighting houses and streets. The indigo is famous for its superior qualities. The inhabitants are apathetic to a degree that is noticeable even in these countries, where everyone is averse to exertion. The women have long and slender fingers, remarkably fine and sensitive, and well adapted to their work. The hats and cigarette holders they make and the articles they embroider are models of delicacy. Cotton spinning and work in bamboo are among the chief industries.

NOTES.

Sugar Industry in France.—Commercial Agent Atwell sends the following from Roubaix, under date of March 12, 1898:

The Department of Excise Revenue has just published the statistics of the home crop up to the 15th of February, 1898.

Three hundred and forty-four mills in active operation this season have worked 6,402,058,179 kilograms (14,084,527,993 pounds) of beet root, against 6,764,559,273 kilograms (14,882,030,401 pounds) during 1896–97. The weight of sugar extracted from the turbines and afterward refined was, on February 15, 656,750,450 kilograms (1,444,850,990 pounds), against 589,236,537 kilograms (1,296,320,381 pounds) in 1897, making a difference of 67,213,913 kilograms (148,870,609 pounds). This difference is due to the superior quality of beet root in general and the rapid working of the poorer produce.

The returns for this season show that 10.26 per cent of the weight of beet root employed has been rendered in refined sugar, whereas the returns for the season of 1896 showed a percentage of only 8.71 per cent of the weight employed, making a surplus of 1.55 per cent for the season of 1897–98.

According to the last returns, the production of refined sugar this season amounts to 690,000 tons in round figures, against 633,390 tons in 1896–97, an increase of 56,000 tons.

The production of refined sugar from molasses will amount approximately to 720,000 tons this season, against 668,515 tons during 1896–97.

The Increase in Sugar Production.—Under date of March 29, 1898, Consul Morris, of Ghent, says:

The Bulletin Consulaire publishes an article which is translated as follows:

> One of the most significant symptoms of the growth of prosperity among all classes is the unprecedented increase in the consumption of sugar. Not very long ago sugar was regarded as a luxury; to-day it has become, we may say, one of the prime necessities.
>
> The Bulletin of Statistics has printed a series of tables which merits attention. Ten years ago the production of sugar in the entire world was only 4,948,000 tons. In 1896–97 the production amounted to 7,205,000 tons. Of this amount, cane sugar

figures for 2,432,000 tons and beet sugar for 4,772,000 tons. The production of cane sugar has increased 25 per cent and that of beet sugar 50 per cent.

What first strikes us in the statement is the commanding position of Germany, which alone produces more than one-fourth of the total quantity produced in the entire world. The German sugar industry in 1896 threw 1,839,000 tons of sugar upon the market, and every day the number of its factories is increasing. France and Russia each produced 700,000 tons, while Austria-Hungary shows 930,000 tons.

For cane sugar, Cuba was, before the insurrection, the principal center of manufacture. In 1887 it produced 1,100,000 tons; in 1896 the production had fallen to 200,000 tons. Java has profited the most by this misfortune; from 390,000 tons in 1887 its production increased to 500,000 tons in 1896. If it be considered that when peace is reestablished Cuba will not be long in equalizing its former output, that Java will probably not care to lose the markets acquired, and that, owing to expor bounties, the production of sugar is annually developing in large proportions, it is easily seen what a terrible competition there will soon be in all the markets of the world. The most curious feature is that this competition specially benefits the only country in Europe not producing sugar—England. At the present moment French sugar is quoted at 2⅜ cents per pound on the London market. To what price must it fall when Cuba once more begins to manufacture and when the German factories reach their full capacity?

Sugar Trade in Japan.—The following, bearing date of Yokohama, March 4, 1898, has been received from Consul-General Gowey:

The following extracts from the Japan Herald of March 2, 1898, give a summary of the condition of the sugar trade of Japan, with statistics of imports of refined and brown sugar from the year 1888 to the year 1897:

It goes without saying that, as the standard of living advances, the consumption of sugar augments steadily year by year, a phenomenon especially marked since the late war with China. Even previous to the restoration, brown sugar was imported by Chinese merchants at Osaka and Yokohama. But as the production of sugar was then stimulated in Kagoshima and Shikoku, while sugar cane was planted in various parts of the country, the quantity imported was not very considerable. A great blow was, however, given to the sugar industry at the time of the Kagoshima rebellion, and as after that sugar did not advance in price in the same proportion as rice, many turned their sugar plantations into rice fields, whereby an impulse was given to the import of foreign sugar. In 1885, the Department of Agriculture and Commerce having adopted the policy of stimulating the planting of sugar cane, the area of plantation was extended, and several promoters established sugar refineries with foreign machinery in Osaka. Although the consumpion of sugar is increasing, it is still far behind that of European countries. According to an examination made the year before last, the per capita consumption of sugar in the United States was 37 pounds per annum, while in Europe it was 18 pounds on an average, and only some 8 pounds in this country. In view of these figures, it is evident that the demand in Japan must augment still further. If, for example, machinery of the newest pattern be set up and sugar imported from Manila and the Straits Settlements be refined, a profitable business may be done, and the existing depression should not occasion real concern. China has heretofore exported brown sugar, and Hongkong and other places have exported the refined article to Japan. But since 1855 the import of German refined sugar produced from beet root has greatly increased and has now almost monopolized the market. The following are the returns showing the import of refined and brown sugars for the last ten years:

Year.	Refined sugar.			Brown sugar.		
	Quantity.	Value.		Quantity.	Value.	
	Pounds.	*Yen.*		*Pounds.*	*Yen.*	
1888	72,268,226	4,424,776	*$3,331,856	73,157,369	2,428,608	*$1,828,742
1889	59,064,123	4,127,078	3,033,275	61,658,039	2,078,139	1,525,354
1890	82,427,832	5,410,784	4,961,689	83,527,782	2,974,075	2,727,227
1891	89,423,325	5,274,117	4,213,019	72,180,259	2,461,625	1,966,838
1892	108,324,527	6,709,283	4,736,754	81,669,954	2,810,331	1,984,094
1893	109,192,835	7,937,306	5,048,127	95,967,233	3,514,720	2,235,362
1894	109,343,475	8,689,748	4,457,841	113,806,711	4,551,848	2,335,098
1895	129,548,753	7,645,856	3,853,511	111,877,023	4,074,241	2,557,417
1896	135,079,561	10,231,150	5,422,509	91,808,779	3,480,588	1,844,712
1897	196,324,595	14,989,637	7,494,818	124,262,630	4,809,455	2,404,727

*NOTE BY BUREAU OF FOREIGN COMMERCE.—The reductions have been made on the basis of the quarterly valuations given by the United States Director of the Mint, the average for the year being taken.

American Flour in Scotland.—Consul Fleming, of Edinburgh, under date of March 28, 1898, says:

Articles which have appeared in the columns of certain milling and flour-trade journals of the United States regarding the adulteration of flour have been reproduced in one of the daily papers of this city, with editorial comments. The statements made by these American journals, as to the adulteration of wheat flour with corn flour, are taken by this paper as a text for sharp criticism of American milling and flour-trade methods. It is asserted that adulterated flour has been sent to this market. The effect of these publications is to put American flour under suspicion. I am informed by provision dealers in Edinburgh and Leith that no adulterated flour has been received by them; but they are somewhat disturbed by these reports from the United States, inasmuch as the British law relating to adulterated food products not only provides for the seizure of such products if discovered, but also fixes a heavy penalty for offering them for sale. Owing to the public agitation of this matter of flour adulteration, bakers and others are requiring flour dealers to give a guaranty that the flour sold is not adulterated. This causes much embarrassment and tends to demoralize the trade. Importers of flour express the opinion that the published statements about flour adulteration in the United States are largely exaggerations, but they say that the effect upon the trade is none the less serious. They declare that the injury done to the American flour trade here will be permanent, unless dealers and consumers can be assured of an effective prohibition by federal law of the exportation of adulterated flour.

Novel Gas-Leak Detector.—Under date of March 28, 1898, Consul Morris, of Ghent, says:

A Boston gentleman asked me yesterday to interview with him certain officers of the gas company of this city concerning the details of the system in force here. During the conversation, reference was made to the manner of detecting leaks in the mains and underground pipes. As the gentleman with me, who is well informed relative to gas matters, had never heard of this method, the details thereof may interest others also. The outfit for detecting leaks consists of a large hand drill or auger, several hollow tubes or pipes of the requisite length, a few corks fitted with quills through the center, a bottle of or-palladium, and a few bits of white paper.

The tubes must be long enough to enter the ground to a point about 15 to 20 inches above the main and to project above the street pavement a sufficient distance for observation, say 3 to 4 feet. They may be iron, such as common interior gas pipe, or, better still, brass, which is lighter to carry and more convenient to handle.

Several paving blocks are first removed for a space of about 2 yards immediately over the gas main, and holes are bored in the soil with the drill, care being taken to thoroughly loosen the earth and extract as much as possible. In each of these holes a piece of the hollow piping is planted. It should not be rammed down too deep, so as to be too near or below the gas main, or to become clogged with dirt. On the upper exposed end one of the corks is placed, with the quill in the center, running up and down parallel to the pipe. A small piece of the white paper is dipped in the or-palladium and pushed into the open quill. Twenty or thirty such detectors are put in position at one time. If a leak exists within, say, 2 yards of any of them, the effect of the escaping gas will be evident upon the paper, rendered sensitive by the reagent, and it will at once turn black. The effect of the action of the gas upon the detector first placed in position will be evident before the last one of a row of twenty is set up. It is a common sight to see two or three men in the streets of Ghent making experiments in this manner for the detection of leaks. Indeed, the gas company causes regular tests to be made in turn in all the streets of the city. The loss by leakage is now said not to exceed more than 3 per cent.

Goat-Milk Cure in France.—In reply to an instruction from the Department of State, dated September 10, 1897, sent at the request of a Massachusetts physician,* Consul-General Gowdy, of Paris, under date of March 10, 1898, sends a report concerning the methods and management of alleged cures effected by the injection of goat serum in France. The report comprises translations from a recent publication by Dr. Bernheim—Immunisation et Serumtherapie.

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*Copy of report has been sent to inquirer.

In regard to the goat-milk cure, Consul-General Gowdy reports:

> I can not discover that goat's milk is used for clinical purposes in France. It is, however, sometimes given to sickly children, when it is found that the milk of cows and the various prepared milks do not agree with them. Goat's milk is very rich in cream and nutritious substances, and there is a popular belief that it is a useful article of diet in pulmonic and anemic complaints. It is served at the domiciles from troops of goats which are milked on the spot, as it is believed that, to be efficacious, it must be drunk fresh from the animal.

Eggs in Spain.—Consul-General Bowen writes from Barcelona, March 25, 1898:

Spain imported, during 1896, 24,402,183 eggs, principally from Morocco and Portugal, and exported 6,920,983, principally to Great Britain. Galicia, in the northern part of Spain, is the only exporting province. The southern provinces are the chief importers. Nowhere in Spain can the production of eggs be very large, for they sell for 2 pesetas a dozen when fresh and for 1½ pesetas when more than four days old (a peseta now is equivalent to about 15 cents gold). Recently, a poultry farm was started in Arenys de Mar, near Barcelona, and 10,000 chickens are annually raised there, and from 1,500 to 2,000 fowls of superior breeds are kept for sale.

German Trade Methods in China.—Under date of April 14, 1898, Consul Morris of Ghent, writes:

The skill of Germans in obtaining foreign trade is well known. Occasionally, however, new and interesting details of their methods come to light. The latest information is furnished by Mr. Leroua, French consul at Hongkong, in a recent report to his Government. He states that the Germans have abandoned the idea of relying entirely upon the trade of Chinese wholesale houses; their principal efforts are now directed to retailers. He says:

> As soon as German commercial travelers land, they begin to study the language; a slight knowledge obtained, they undertake with unequaled persistency to persuade some native merchant to give them a trial order. As soon as the goods arrive, they visit their client, and if he makes any complaint they assure him that the fault or error can be readily corrected or avoided in the next order; if necessary, they finally make a considerable reduction in the amount of the bill.
>
> When the day of payment arrives, another visit is made. This time the pur-

chaser is told he need not press himself to settle the whole account; a partial payment will suffice if he is willing to give a new order. If the client consents he is trapped. Although the merchandise may be inferior to French or English makes, it offers to the dealer the great advantage of cheaper prices and greater profits. The consumer becomes accustomed to it and hesitates to pay the higher price for the better article.

Thus, at the expense of many apparent concessions and much hard labor—relatively small, however, in proportion to the results—the market is opened to German goods. It is afterwards comparatively easy to enlarge it.

Trade-Mark Statistics in Japan.—The following, bearing date of Yokohama, March 30, 1898, has been received from Consul-General Gowey:

The inclosed clipping from the Japan Times furnishes some interesting statistics concerning the registration of trade-marks and designs in Japan.

REGISTRATION OF TRADE-MARKS AND DESIGNS BY FOREIGNERS.

Trade-marks.—From the 21st of November, 1896, to the 21st of March, 1898.

Total number of applications	2,133
Registered	1,594
Applications pending under Article XII, rules of practice of the law of trade-marks	164
Under examination	68
Rejected and reexamination not yet demanded under Article XI of the law of trade-marks	5
Under reexamination	9
Rejected and trial not yet demanded under Article XI of the law of trade-marks	15
Under trial	3
Rejection concluded	200
Application annulled	37
Applications withdrawn	38

Designs.—Classified list (from the 27th of January, 1897, to the 21st of March, 1898).

Total number of applications	12
Registered	1
Under examination (notice given to file specification)	10
Under reexamination	1

Bounties on Silk Exports in Japan.—Consul-General Gowey, in a report dated Yokohama, April 2, 1898, refers to the law granting a bounty on the direct export of silk, passed in March, 1897, and due to take effect April 1, 1898 (see CONSULAR REPORTS No. 202, July, 1897, p. 424). Mr. Gowey incloses newspaper clippings, from which it appears that there has been widespread opposition to the law, and that if the House of Representatives had not been dissolved at the commencement of the Diet's last session, a bill for rescinding the law would have been introduced. Such a bill will be submitted to the new Diet in the special session in May, 1898. In the meantime the law is in operation, and an imperial ordinance of March 29, 1898, determines the qualifications necessary to receive the bounty. From the terms of the ordinance, it seems that the standards of the original law have been slightly lowered and the bounties rendered more accessible.

Under date of April 11, the consul-general notes the shipment of 13 bales of silk to New York, which fulfill the conditions of the law and on which the shippers will accordingly receive the bounty.

Paint Industry in Japan.—Under date of March 3, 1898, Consul-General Gowey, of Yokohama, transmits a clipping from the Japan Herald, of March 2, 1898, giving statistics and other information relative to the paint industry in Japan.

The import of paint is increasing year by year to keep pace with other industries. The following figures show the quantities imported and reexported during the last ten years:

Year.	Import.			Reexport.		
	Quantity.	Value.*		Quantity.	Value.*	
	Pounds.	*Yen.*		*Pounds.*	*Yen.*	
1888	1,205,313	109,641	$82,560	3,143	244	$184
1889	1,258,405	111,710	81,995	6,432	527	387
1890	1,186,697	108,549	99,539	6,441	611	560
1891	1,314,041	120,948	96,637	4,224	425	341
1892	1,011,338	97,184	68,612	4,863	431	304
1893	972,697	96,136	42,962	9,164	927	590
1894	1,221,357	148,100	75,975	8,757	1,230	631
1895	2,420,746	292,888	147,616	28,520	3,681	1,855
1896	2,463,921	272,146	144,237	24,660	3,909	2,072
1897	3,085,082	369,435	187,673	25,989	3,864	1,963

* Reduced to United States currency according to the average given for each year by the Director of the Mint. The gold standard, on which basis the yen is valued at 49.8 cents, was adopted in Japan October 1, 1897.

The reexport was to Korea, China, and Asiatic Russia, but was very insignificant, the consumption at home covering nearly the whole. After 1895, the quantity imported doubled, a fact which may be partly due to the increased repairs of vessels, necessitated by the war with China, but also to general increase of demand. The countries which import paint are England, Germany, Belgium, France, and the United States, the British product forming nearly 80 to 90 per cent of the entire import. In Japan, the industry is so far insignificant.

New York-Japan Steamship Line.—Consul Skinner, of Marseilles, says, under date of April 2, 1898:

The *Indrapura* is about to leave this port for New York, to take her place in a fleet of new boats just being built for the purpose of plying between the ports of Japan and New York. Until now the traffic between the United States and Japan has been in the control of unattached vessels sailing at irregular intervals, and I am informed that the pioneer effort to maintain a regular service is about to be undertaken by the organizers of the Indra Line, the title word signifying "Kings of India." The fleet will fly the British flag and will include the following ships, each with an average carrying capacity of 3,150 tons: *Indravelli*, *Indralema*, *Indrani*, *Indra*, and *Indrapura*. The increasing commerce between New York and Japan is responsible for the organization of the Indra Line, the New York agents of which are Funckeyde & Co. Monthly sailings will be undertaken, and the boats will touch at Marseilles when not completely loaded for either New York or Japan. The *Indrapura* will make the line's maiden trip, and will be freighted with Baldwin locomotives and miscellaneous manufactures.

Banks in Japan.—Consul-General Gowey, of Yokohama, under date of March 10, 1898, says:

The inclosed clipping, taken from the Japan Gazette of yesterday, stated to be based on official information, shows the number of banks in Japan and their capital at the end of February, 1898.

The following list shows the number of banks existing in Japan and the amounts of their capital at the end of February, 1898, as classified by the Department of Finance:

Banks.	Number.	Capital.*	
		Yen.	
Bank of Japan	1	30,000,000	$15,000,000
Specie bank	1	12,000,000	6,000,000
Industrial bank	1	10,000,000	5,000,000
Agricultural banks	14	8,150,000	4,072,000
National banks	38	8,425,000	4,212,500
Savings banks	227	20,925,000	10,462,500
Joint-stock banks	1,142	225,867,440	112,933,720
Joint-name banks	32	6,313,900	3,156,950
Joint-capital banks	105	9,106,874	4,553,437
Individual banks	75	4,829,020	2,414,510
Total	1,636	335,617,234	167,808,617

*The reductions to United States currency, made in the Bureau of Foreign Commerce, are given in round numbers.

Russian Bank in Korea.—Consul-General Allen sends the following from Seoul, under date of March 3, 1898:

Referring to my report of February 15, relative the Russo-Korean Bank,* I would now add that this bank was duly opened in Seoul on March 1 under the management of a Russian, Mr. St. Gabriel, assisted by another Russian and a Scotchman. The institution is prepared to conduct a regular banking business and grant foreign exchange. Its chief business will be the management of Korean revenues, the mint, and the taxes.

American Locomotives in Japan.—Consul Lyon writes from Hiogo, March 19, 1898:

The Kobé Chronicle, an English journal published at this port, under date of the 15th instant copied from a vernacular newspaper the statement that the authorities of the locomotive department at Shimbashi station (Tokyo) are of opinion that American locomotives are superior in all respects to those made in England, and work more economically.

American locomotive makers have of late been quite active in contesting this field, and such expressions as the above should stimulate them to still greater effort.

American Fire Engines at Manila.—Under date of February 10, 1898, Consul Williams writes from Manila:

On Sunday, February 6, there occurred here the most devastating fire in many years. Insurance agents inform me that the total loss was $1,250,000 gold, or $2,500,000 in Philippine silver. This was covered by an insurance of $375,000 gold, or $750,000 silver, showing a net loss of $875,000 gold, or $1,750,000 silver.

The greatest consternation prevailed during the fire, as it was in the heart of the city. Vast crowds thronged the streets and stacks of goods were piled in streets and plazas.

It gives me great pleasure to state that, by universal consent, the city would have been lost had it not been for the splendid service of the Ahrens fire engine, made at Seneca Falls, N. Y.

It is conceded also that with four more such engines the protection would have been perfect, and the loss avoided. I shall use my best efforts to induce the city to equip its fire department wholly from the United States, as the Ahrens engine did more work than the three European machines together.

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* See Consular Reports No. 212 (May, 1898), p. 62.

An American Engineer in China.—Consul-General Goodnow writes from Shanghai, March 26, 1898:

Capt. Watson W. Rich, late chief engineer of the Sault Ste. Marie Railway, has been appointed consulting engineer to the Chinese Railway Administration, with headquarters at Shanghai. Captain Rich will be in charge of all railway building in China, under the immediate direction of Sheng Tajen, Director-General of Railways.

Concessions to Americans in Honduras.—Under date of March 31, 1898, Consul Little writes from Tegucigalpa:

Among the important acts passed during the annual session of the Congress of this country was one granting a concession to John E. Wood, representing capitalists of Cleveland, Ohio, for opening the bar of, and navigating, the Patuca River. The following is a brief outline of the concession:

The grantee is to open the bar at the mouth of the river, making a channel that will admit the lighter draft ocean-going steamers; build a wharf and custom-house, and establish a line of steam transportation from the mouth of the river to a point about 150 miles from the sea.

In return, the grantee receives from the Government wharfage on all articles, whether of export or import, that pass through the channel of the bar; the exclusive privilege of navigating the river by steam or other motive power for a term of ten years; the preference in concessions for railroads from the head of navigation to points in the department of Olancho that may be granted by the Government; certain favorable terms to colonists that may come into the country under the auspices of the grantee or the company he may form; and 100,000 hectares (247,110 acres) of land.

The Patuca River is the most important stream in the country, and steam transportation will have been provided for what is considered the richest agricultural section of the country, if this scheme of navigating it is carried to a successful issue.

Nicaraguan National Railway.—Consul Sorsby writes from San Juan del Norte, March 25, 1898:

Referring to the many rumors current here and in the United States relative to the national railway and lake transportation system of Nicaragua, and its probable acquisition by the Atlas Steamship Company,* I have to say that Mr. Louis Wichmann, the representative of the company in this country, informs me that no definite decision has been reached in respect to the purchase of the property by that company, and that no specific offer for its purchase is contemplated until an examination of, and report on, the property has been made, which will take place at an early date.

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* See CONSULAR REPORTS No. 211 (April, 1898), p. 475.

The foreign debt of the Government, on account of the road, is £280,000 ($1,362,000); and two years' defaulted interest at 4 per cent is due.

There are two main pieces of railway, viz, from Corinto, on the Pacific, to Momotombo, at the head of Lake Managua, 58 miles; and from Managua, near the foot of Lake Managua, to Granada, on the west shore near the head of Lake Nicaragua, 32 miles.

The tracks are 3½ feet wide. Connection between Momotombo and Managua is effected by small steamers, which belong to the railway system.

There are a number of additional miles of railroad in extensions and branches, but I am unable to secure correct data regarding the same.

Dominican Tariff Increase.—The following has been received from Consul Grimke, dated Santo Domingo, March 28, 1898:

I transmit a copy and translation of a new law of the Dominican Government, increasing all customs duties 10 per cent; the same to take effect on and after the 1st day of April, 1898.

DECREE.

ARTICLE 1. That there be created a surtax of 10 per cent on the customs dues existing at present, destined exclusively for the guarantee and payment of the obligations contracted by the Government with the internal commerce of the Republic, in connection with the operations which are being carried on in the conversion of the foreign debt denominated "consolidated gold bonds, 4 per cent, 1893" and the "French-American reclamation consols, 1895."

ART. 2. The time during which the surtax decreed in the foregoing article shall be applied shall be left to the discretion of the Executive, and regulated as he may deem advisable.

§ This provision shall go into effect on the 1st of April of the current year.

ART. 3. The present decree shall be sent to the Executive for promulgation and for other constitutional effects.

Brazilian Statistics.—The following has been received from Consul-General Seeger, dated Rio de Janeiro, March 22, 1898:

With every mail this office receives requests from all parts of the Union for statistics relating to the various branches of industry and commerce of Brazil. I regret to say that in many cases it is impossible to furnish the desired information. The science of statistics seems in its infancy here, and there is probably nothing more difficult to get than fresh and accurate data concerning the various functions of the economic life of the nation.

The Jornal do Commercio, one of the most influential and best edited newspapers in Brazil, says, in regard to these conditions:

> The reports of the Minister of Finance do not contain information on the finances of the States and the estimates of annual imports and exports of the Union. This lack of statistical data explains the uncertainty prevailing at home and abroad in regard to our resources, and paves the way to all sorts of interpretations by interested parties, who "boom" them or deprecate them according to their purpose.
>
> Although the constitution binds neither the States nor the President of the Union to give an annual statement of the financial and economic situation, it can not be denied that this omission is extremely detrimental to the advancement of public affairs. The general interest demands a knowledge of the condition of every branch of Government; on this knowledge depends the credit of the nation, as well as of the different States, in the foreign money market, where we have to obtain the means to develop our resources and to create industries indispensable to a healthy development of our country.

New Postal Stamps in Venezuela.—Under date of February 23, 1898, Consul Plumacher sends from Maracaibo a translation of a decree from the Government of Venezuela in regard to a new issue of postal stamps, which he thinks may be of interest to stamp collectors.

> The President of the Republic has created, by a decree dated the 20th of the present month, a new type of postal stamps to be used on official correspondence directed to foreign countries.
>
> These stamps shall be of 28 millimeters (1.1 inches) in length by 24 millimeters (nine-tenths of an inch) in width. The issue shall be divided into five classes, viz: That of 0.05 bolivar (1 cent), dark green; that of 0.10 bolivar (2 cents), red; that of 0.25 bolivar (5 cents), blue; that of 0.50 bolivar (10 cents), yellow; that of 1 bolivar (19 cents), violet.
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> The aforesaid decree shall be put into force on the 1st of March next.

Projected Harbor Works of Montevideo.—Consul Swalm, of Montevideo, under date of February 24, 1898, says:

Plans are being definitely made for the much-needed improvements of this harbor. As soon as the elections are held, the work will be undertaken by contract. It has grown to be vital to the interests of Montevideo and of the Republic, and longer delay will not be allowed. It has been seen that Buenos Ayres has grown wonderfully with the aid of a modern harbor, while the shipping here has decreased.

Plans have been prepared, but they will all be examined again and submitted to the judgment of skilled engineers—among others, those from the United States. The work will cost from $7,000,000 to $15,000,000, and the attention of our contractors should be drawn to the enterprise. For a previous report on this subject, see CONSULAR REPORTS No. 186 (March, 1896), p. 338.

Railway Contract in Guatemala.*—Consul-General Beaupré, of Guatemala, reports, under date of April 6, 1898, that Messrs. May and Jekyll, citizens of the United States, have contracted to operate the Northern Railroad of Guatemala, receiving from the Government a bonus of $40,000 per month. Mr. J. T. Norton, an American, will be general manager, and most of the employees will be citizens of the United States. The contract goes into effect on the 15th instant.

English Schools in Ecuador.—Consul-General De Leon, in a communication dated Guayaquil, March 1, 1898, urges the establishment of English schools in Ecuador. He estimates the population of the country at 1,500,000, and says that only from 10 to 20 per cent can read and write. The consul-general incloses a letter from a missionary—Mr. William G. Fritz—who says that the people possess many noble traits of character and lack only education to develop into a fine race. They admire Americans, and many have expressed a desire to learn English. The establishment of schools by philanthropists in the United States would be a work of progress, and would also bring the two countries closer together commercially.

Reorganization of Government in Uruguay.—Minister Finch writes from Montevideo, under date of March 3, 1898, in regard to the reorganization of the Government, and speaks in high terms of the new President. He thinks that under present conditions Uruguay will offer a good field for United States enterprise.

German Commercial Treaty with Chile.—Consul Monaghan, of Chemnitz, says, under date of April 15, 1898:

Germany is working on a great many commercial treaties. The one with Chile is so far advanced that its completion is only a matter of a few months. The treaty of 1862 between Chile and Germany went out of existence in 1895. The rapidly increasing trade between the two countries renders a renewal almost imperative.

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* *Ante*, p. 218

German imports from Chile in 1880 were 12,000 double hundreds (220 pounds) of goods, worth $607,500; in 1896, 506,000 double hundreds, worth $8,655,750. Nearly half of the imports consists of nitrate for fertilizing purposes. Sole leather is next in importance; then come raw hides, gold, and copper. The exports thither are textiles and iron articles. In 1894 and 1896 Germany sent Chile: Woolen goods (6,184 double hundreds), valued at $987,500;* cotton goods (15,445 double hundreds), $1,556,500; coarse iron articles (36,651 double hundreds), $475,220; fine iron (5,843 double hundreds), $840,000; sugar (60,768 double hundreds), $413,000.

New Use for Carrier Pigeons.—Consul Skinner, of Marseilles, writes, under date of April 6, 1898:

For a period of five years the Federation Colombophile de Marseille has been training homing pigeons for the purpose of securing information from ships at sea, and now furnishes reports of the complete success of the experiments. Birds released from Marseilles steamers at a distance of 500 kilometers from this port (the equivalent of about 312 miles) have reached the home lofts promptly. Similar experiments are being made on the Atlantic liners, and it is not too much to expect that in the near future there will be an end to the uncertainty often felt as to the fate of belated steamers.

Pavements in Berlin.—Consul-General Goldschmidt, of Berlin, under date of March 30, 1898, says that he has received a number of communications inquiring into the progress of street paving in that city, and desires to state that the area of carriage pavements is 6,500,405 square yards. Of this area, a fraction less than 74 per cent has stone pavement, about 25 per cent asphalt, and a fraction over 1 per cent wood pavement. The proportion of asphalt is steadily increasing. The soil, continues Mr. Goldschmidt, consists of coarse, gritty sand, forming apparently an excellent foundation for the heavy 8-inch layer of gravel and cement, over which the 2-inch covering of asphalt is spread, making a strong and durable pavement. The average price of asphalt pavement in Berlin is $2.80 per per square yard. The city government grants the contracts for laying the pavements, and also for keeping them in repair for twenty years, the first five years without extra compensation and after that for an annual compensation of 10 cents per yard.

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* In round numbers.

German Use of Coke in Stationary Steam Plants.—Consul Bouchsein writes from Barmen, March 11, 1898:

According to a report on smoke-consuming appliances of a royal Prussian commissioner, none of the systems give perfect smokeless combustion of coal. Coke is therefore extensively used in stationary steam plants where smoke is objectionable. Consumption in this line has increased rapidly in recent years, amounting to 7,900,000 tons in 1894 in Germany, an increase of 11.1 per cent over that for the preceding year.

Wine and Grape Trade of Germany (Correction).—Consul Schumann, Mainz, February 11, 1898, in his report printed in CONSULAR REPORTS No. 211 (April, 1898), page 544, headed his quantity tables "cwts.," which, in the Bureau of Foreign Commerce, was interpreted to mean the German "cwt." (110.22 pounds), and a note to that effect was printed at the foot of the page to distinguish it from the British "cwt." (112 pounds). Under date of April 2, the consul writes that what he meant was the American "cwt." of 100 pounds, which greatly modifies the quantities given.

New Parliament Buildings in British Columbia.—Consul Smith sends from Victoria, under date of February 16, a report in regard to the opening of the new parliament buildings in that city. The structure, in the erection of which stone quarried in the Province was employed, covers more than an acre and is conceded, he says, to be the finest public building in Canada, except the government mansion at Ottawa. It was begun in 1893 and cost a little less than $1,000,000.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
E. Schneegans, Saigon	Mar. 15, 1898	Rice market	Department of Agriculture.
W. H. H. Graham, Winnipeg.	April 29, 1898	Wheat sowing	Do.
W. K. Anderson, Hanover	April 19, 1898	Live stock census in Prussia	Do.
F. Dillingham, Auckland	April 2, 1898	Agricultural statistics	Do.
A. D. Dickson, Nottingham.	May 3, 1898	do	Do.
E. H. Plumacher, Maracaibo.	April 25, 1898	Leprosy	Marine Hospital Service.

FOREIGN REPORTS AND PUBLICATIONS.

French Colonies in West Africa.—The Bulletin de la Société de Géographie Commerciale, Paris, Vol. XIX, 1897 (Nos. 8, 9, and 10), says:

The only way to turn these colonies to account is to create means of communication. The English, the North Americans, and the Belgians commence by putting down rails in countries where Frenchmen would say; "Nothing can be done." They know that facilities of communication will animate deserts. What profit would a merchant or a planter gain on an article that must be produced in the interior of a country where means of transportation do not exist? Ordinarily, it would cost ten or twenty times more than its mercantile value. Certain articles, such as ivory, for example, find purchasers; but ivory represents only present wealth, and not a resource for the future. In Senegal, who would ever have dared hope for results as satisfactory as those of the railroad from Dakar to Saint Louis? Yet what a desolate country this road traverses—lands parched and barren, with here and there a few trees. Had not the necessity for rapid transit between the two towns been felt, the projector of the work would have been considered a fool. Those who are opposed to colonial extension should take note of the prosperity of this line, and of the existence of European villages wherever the means of creating the comforts of life can be found. If the Government possessed to-day all the money that the expeditions to the Soudan have cost, it would have enough to build a railroad from Saint Louis to Lake Tchad. Is it practicable to push expeditions without having rapid means of communication behind them? Obtaining supplies under present conditions of transportation would cost enormously, from 1,000 to 12,000 francs ($193 to $2,316) a ton. It would be better to conquer a certain zone, maintain ourselves there during the time necessary for the construction of a railroad; then conquer a second zone, following with the road, etc. Employing soldiers as well as the natives for manual labor, a kilometer (0.62137 mile) of road would probably not cost more than 40,000 francs ($7,720); 1,000 kilometers (621 miles) would then cost about 40,000,000 francs ($7,720,000). France pays an annual subsidy of 9,000,000 francs ($1,737,000) for the expenses of the Soudan. If for the last ten years we had had the will and the confidence which we lack in colonial matters, 4,000,000 francs ($772,000) might have been employed each year for this object, and to-day we would have had 1,000 kilometers in place of the few of the so-called Soudan Railroad. The aim of the conquest of the Soudan is Tchad. A line of penetration starting from Cotonou, having Say for its objective point, would have a length of about 800 kilometers (497 miles). From Dakar to the same point it is about 2,250 kilometers (1,398 miles). The conquest of the Soudan by way of Senegal should stop, and we should install ourselves at Say. The annual grant of 9,000,000 francs ($1,737,000) to the Soudan might be considerably reduced, and a portion employed in the construction of the road from Cotonou to Say. In the course of a few years we would have our railroad, a prosperous colony, and the conquest of the Niger would be accomplished almost in peace. The law requires of a

French citizen three days per year in labor or money equivalent. Why is this not required of the negroes? It would seem natural to ask twice as much. The situation in our colonies is far inferior to that of other nations. If they were peopled with planters, merchants, and manufacturers, in place of being filled with officials, the governors would be forced to do what common sense demands.

Competition of Inventions in Bohemia.—An article in the Revue du Commerce Extérieur (Paris, February 5, 1898) says:

During the exposition of architects and engineers held at Prague from the 15th of June to the 15th of October, 1897, the Society for the Encouragement of Trade and Manufactures in Bohemia organized an international competition for mechanical inventions. Articles in use in domestic trades and professions, machines and apparatus tending to lessen the price of production, as well as to render it more rapid and more perfect, are to be especially considered. Prizes in money will be given, and only inventions till now unknown in the Kingdom, and which have never appeared in any exposition in Bohemia, will be admitted.

A prize of 1,000 crowns gold ($203) will be awarded to the best invention. Other prizes will be given, the amount to be in proportion to the importance of the invention. Diplomas of honor and medals of silver and of bronze will also be distributed. The list of prizes and awards can not be definitely fixed until after the examination of the demands for admission.

The inventions, machines, and apparatus which are admitted will be publicly exhibited, and should be accompanied by explanations as to use and manner of operating. For inventions not yet patented, provisional measures will be taken in a manner to secure their protection.

Merchant Marine of Foreign Countries.—A report in the Revue du Commerce Extérieur (Paris, February 5, 1898) reads as follows:

The extraordinary activity displayed in the departments of naval construction of Great Britain, Germany, and other countries has resulted in the increase of the commerce of the entire world. Even in an ordinary year, the number of vessels lost either by shipwreck or by condemnation is far inferior to the number built. England alone launched from her dockyards, between the autumn of 1895 and that of 1896, new vessels with a gross tonnage of 1,159,000 tons, while the total number of ships, of all countries, wrecked or condemned in the same period was:

Description.	Vessels.	Gross tons.
Steamships	302	370,000
Sailing vessels	1,454	480,000
Total	1,756	850,000

Showing that England has built fully 300,000 tons more than all the fleets of the world have lost. The loss in sailing vessels has not been counterbalanced, but the proportion of new steamers is much more considerable. The commercial fleets of the world may be stated as follows:

Year.	Number.	Tons net.
Sailing vessels.		
1895	29,570	9,324,000
1896	29,348	9,136,000
Decrease	222	188,000
Steamships.		
1895	10,896	10,360,000
1896	11,155	10,761,000
Increase	259	401,000

Apparently, there is a gain of only 213,000 tons; but when we consider that the steam ton, by its more rapid voyages, has a capacity of transport at least three times superior to that of the sailing ton, it will easily be seen how the capacity of transportation has increased.

The commercial fleet of England has stood first for a long time, and is strengthening its place by increasing the number of vessels and at the same time getting rid of old sailing boats. These, for the most part, are sold to Norwegian shipowners, who use them to carry wood. On the other hand, but few new sailing vessels are being built. As it is, the sailing fleet of England, with its 3,267,000 tons, represents more than a third of the world's fleet. In regard to steamships, the English increase has been 182,000 tons net. These represent, with 6,413,000 tons net, nearly 60 per cent of the steam fleets of the entire world. North America comes next, with 1,358,000 tons sailing vessels and 529,000 tons steamers; then Norway, with 1,176,000 tons sailing vessels and 314,000 tons steamships. The great number of sailing vessels in these fleets takes from them much of their value.

Germany ranks fourth; but, if the steam fleet only be considered, she occupies the second place, while in the value and number of her passenger steamships she stands above all countries except England.

German Export Syndicate.—The Recueil Consulaire (Brussels, Vol. XCIV, 1897) has the following:

The attention of our manufacturers and tradespeople should be called to the development of the Export Verband (a society of German traders and manufacturers having its office in Berlin) in European as well as in Asiatic Turkey. This society, a branch establishment of which has been for several years located at Constantinople, possesses immense warehouses in that city, in which the following articles are exhibited and sold: Steam engines, gas and petroleum motors and lamps, turning lathes, machines for drilling and piercing, shears for sheet iron and for pasteboard, machines for tinware, forges, locksmiths' and carpenters' tools, pumps, implements of husbandry, cement, asphalt, tarred paper, Dutch ovens, kitchen utensils, hygienic apparatus, sewing machines, bicycles, pianos, linoleum, etc. The society has, besides, branch establishments in Greece and Egypt, agents and warehouses at Salonica, Smyrna, Messina, Aleppo, Beirut, Damascus, Haifa, and Jaffa, and is about to open a new agency at Broussa. The society has had a wonderful success in Turkey, and, by its well-assorted display of goods, offers formidable competition to the productions of other countries. It is evident that the purchaser of any machine will always prefer to pay more if he finds it in the market, rather than import it from Belgium or elsewhere.

The Commercial Position of Spain.—An article with the above heading in the London Times of May 4, 1898, says:

A report of special interest at the present moment has just been published by the Foreign Office. It is prepared by Mr. Harrison, the commercial attaché to the British embassy at Madrid, and deals exhaustively with the condition of trade in Spain and the position which that country occupies in the commerce of the world. Mr. Harrison gives a gloomy account of the state of affairs during the past year. Trade, he says, was depressed by present difficulties and dread of the future. Manufacturers, merchants, and workmen all suffer directly from the troubles of the country, and the accumulation of misfortunes exercises its natural influence on commerce. "As prices increase, consumption decreases and industry languishes, affecting all classes of the population. The rise in exchange on foreign countries, the crisis in agriculture, the heavy taxes, and the high duties imposed by the tariff now in force have decreased importations, and tend to limit them to absolute necessities and articles that can not be produced cheaply at home. Exports, although they have recovered during recent years from the loss suffered after the renunciation of the commercial treaties, are not really as beneficial to the producer as they appear. The want of capital, and consequent necessity to sell at once, make the manufacturer the ready prey of the speculator, who thus gains the greater share of the profits." The actual condition of Spanish trade can be understood only when it is remembered that the commercial treaties and the normal state of trade came to an end in 1892, whence arose great fluctuations in imports and exports. Conventions were made with certain countries, and now there are four groups of nations having different commercial relations with Spain, and subject to different tariffs for their exports to that country. Spanish exports consist for the most part of agricultural and mineral products; but during recent years, owing to the colonial wars, coined money has been imported in large quantities. Manufactured goods are relatively of small importance. Thus, in 1896, the chief exports in order of importance were: Wine (15 per cent of the whole export trade), silver money (14.3), minerals (10.6), metals, (9.6), fruit (8.8), and cotton cloth (5.4). The chief imports, and those which form the basis of the national income from customs duties, are codfish, cocoa, pertoleum, wheat and other grain, spirits, sugar, coffee, and flour. These produce about 45 per cent of the total duties on imports. Sugar, spirits, coffee, and wheat flour are no longer of great importance; while wheat and other grain, which form by far the most important item, can not be considered a sure source of income, as the amount depends on the home crop and the demand for flour in Cuba. Petroleum, the next most important item, has every year more difficulty to contend with gas and electricity, and its general use is decreasing. Codfish is the most satisfactory source of customs revenue in Spain, and remains one of the staple articles of food there.. Of the total trade of Spain, excluding the precious metals, France had 25.4 percent, the United Kingdom 23.9, Cuba 10, the United States 5.4, and all other countries under 5 per cent. Great Britain and France absorb more than half the exports, send nearly half the imports, and have very nearly half the total foreign trade; but Mr. Harrison thinks that under French trade with Spain is included much that is in transit to other countries. Of the Spanish colonies, Cuba has 10, Puerto Rico 4, and the Phillippines 3.9 per cent of the trade. The comparatively large imports from the United States (4.8 per cent) are composed of lumber and raw cotton. The total imports of Spain in 1896 amounted to over £33,500,000, and the exports to over £38,750,000—a total of £77,280,000—of which Catalonia absorbed 32, Andalusia 20.9, Vascongadas 12.8, and Valencia 12 per cent, respectively. Mr. Harrison, referring to the scarcity of grain in Spain during the past winter, traces the customs legislation in that country in regard to wheat and wheat flour during the present century. It has undergone many changes. In 1890 the duties imposed were 8 pesetas (or francs)* per 100 kilograms of wheat and 13.26 pesetas on flour, while in 1895 an extraordinary surcharge was imposed, making the duties 10½ pesetas on wheat and 17.30 pesetas on flour. Since 1869 imported wheat has been one of the chief sources of customs revenue, and in 1895 and 1896 yielded 17 per cent of the whole. The crop of 1897 was much larger than that of the previous year, and larger than the average. As to the textile industries, the increased customs duties of 1892 have protected all home manufactures, chief among them being those of textiles. The markets thus created at home and in the colonies are only impeded by the heavy duties on raw materials, which cause Spanish textiles to be hardly cheaper than those imported. "Although the result has been an appreciable gain in the receipts of the custom-house, general trade has declined; and there is a large decrease in the quantity of goods consumed, as is evident from the fact that a decreased importation of raw materials does not prevent an increased exportation of manufactured goods. The present condition of the textile industry in Spain is purely artificial. In cotton goods an average annual export amounts to 8,675 tons, and of this only 271 tons are exported to foreign countries, making 96.87 per cent consumed in Spanish colonies." Of Spanish woolens 76.4 per cent and of silks 88 per cent go to the colonies. The wine trade appears to be improving, Spain coming next to France and Italy in amount of production; while Mr. Harrison thinks that with more skill in their manufacture Spanish wines should have no difficulty in commanding their own market. In 1896 Spanish mines produced over £4,250,000 worth of minerals, valued at the mouth of the mine. Of this, lead came to over £1,500,000, iron to over £1,000,000, copper to less than £500,000, coal to over £500,000, and quicksilver and salt to about £250,000 each. Shipping is a very important Spanish industry, and the tonnage of the Spanish mercantile marine is only exceeded by that of Great Britain, France, Germany, and Norway. In Spanish ports, British shipping holds the first place, the tonnage being four times greater than that of the national shipping, which comes second.

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* According to the valuation of the United States Director of the Mint, 1 peseta=19.3 cents.

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Vol. LVII. No. 214.

CONSULAR REPORTS.

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JULY, 1898.

COMMERCE, MANUFACTURES, ETC.

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DEPARTMENT OF STATE * UNITED STATES OF AMERICA *

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1898.

PUBLICATIONS OF THE BUREAU OF FOREIGN COMMERCE.*

The publications of the Bureau of Foreign Commerce, Department of State, are:

I.—COMMERCIAL RELATIONS, being the annual reports of consular officers on the commerce, industries, navigation, etc., of their districts.

II.—CONSULAR REPORTS, issued monthly, and containing miscellaneous reports from diplomatic and consular officers.

III.—ADVANCE SHEETS, CONSULAR REPORTS, issued daily, except Sundays and legal holidays, for the convenience of the newspaper press, commercial and manufacturing organizations, etc. [See pages I–VII.]

IV.—EXPORTS DECLARED FOR THE UNITED STATES, issued quarterly, and containing the declared values of exports from the various consular districts to the United States for the preceding three months.

V.—SPECIAL CONSULAR REPORTS, containing series of reports from consular officers on particular subjects, made in pursuance to instructions from the Department.

Following are the special publications issued by the Bureau prior to 1890:

Labor in Europe, 1878, one volume; Labor in Foreign Countries, 1884, three volumes; Commerce of the World and the Share of the United States Therein, 1879; Commerce of the World and the Share of the United States Therein, 1880–81; Declared Exports for the United States, First and Second Quarters, 1883; Declared Exports for the United States, Third and Fourth Quarters, 1883. Cholera in Europe in 1884, 1885; Trade Guilds of Europe, 1885; The Licorice Plant, 1885; Forestry in Europe, 1887; Emigration and Immigration, 1885–86 (a portion of this work was published as CONSULAR REPORTS No. 76, for the month of April, 1887); Rice Pounding in Europe, 1887; Sugar of Milk, 1887; Wool Scouring in Belgium, 1887; Cattle and Dairy Farming in Foreign Countries, 1888 (issued first in one volume, afterwards in two volumes); Technical Education in Europe, 1888; Tariffs of Central America and the British West Indies, 1890.

The editions of all these publications except Tariffs in Central America, etc., are exhausted and the Department is, therefore, unable to supply copies.

In 1890, the Department decided to publish reports on special subjects in separate form, to be entitled SPECIAL CONSULAR REPORTS. There are now the following SPECIAL CONSULAR REPORTS:

Vol. 1 (1890).—Cotton Textiles in Foreign Countries, Files in Spanish America, Carpet Manufacture in Foreign Countries, Malt and Beer in Spanish America, and Fruit Culture in Foreign Countries.

Vol. 2 (1890 and 1891).—Refrigerators and Food Preservation in Foreign Countries, European Emigration, Olive Culture in the Alpes Maritimes, and Beet Sugar Industry and Flax Cultivation in Foreign Countries.

Vol. 3 (1891).—Streets and Highways in Foreign Countries.

Vol. 4 (1891).—Port Regulations in Foreign Countries.

Vol. 5 (1891).—Canals and Irrigation in Foreign Countries.

Vol. 6 (1891 and 1892).—Coal and Coal Consumption in Spanish America, Gas in Foreign Countries, and India Rubber.

Vol. 7 (1892).—The Stave Trade in Foreign Countries and Tariffs of Foreign Countries.

Vol. 8 (1892).—Fire and Building Regulations in Foreign Countries.

Vol. 9 (1892 and 1893).—Australian Sheep and Wool and Vagrancy and Public Charities in Foreign Countries.

Vol. 10 (1894).—Lead and Zinc Mining in Foreign Countries and Extension of Markets for American Flour.

Vol. 11 (1894).—American Lumber in Foreign Markets.

Vol. 12 (1895).—Highways of Commerce.

Vol. 13 (1896 and 1897).—Money and Prices in Foreign Countries.

Of these SPECIAL CONSULAR REPORTS, Australian Sheep and Wool, Cotton Textiles in Foreign Countries, Files in Spanish America, Fire and Building Regulations, Malt and Beer in Spanish America, Port Regulations, Refrigerators and Food Preservation, and Tariffs of Foreign Countries are exhausted, and no copies can be supplied by the Department.

Of the monthly CONSULAR REPORTS, many numbers are exhausted or so reduced that the Department is unable to accede to requests for copies. Of the publications of the Bureau available for distribution, copies are mailed to applicants without charge. In view of the scarcity of certain numbers, the Bureau will be grateful for the return of any copies of the monthly or special reports which recipients do not care to retain. Upon notification of willingness to return such copies, the Department will forward franking labels to be used in lieu of postage in the United States, Canada, the Hawaiian Islands, and Mexico.

Persons receiving CONSULAR REPORTS regularly, who change their addresses, should give the old as well as the new address in notifying the Bureau of the fact.

In order to prevent confusion with other Department bureaus, all communications relating to consular reports should be carefully addressed, "Chief, Bureau of Foreign Commerce, Department of State, Washington, U. S. A."

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* Formerly Bureau of Statistics. Name changed to Bureau of Foreign Commerce by order of the Secretary of State, July 1, 1897.

DAILY CONSULAR REPORTS.

Beginning January 1, 1898, the miscellaneous reports of consular and diplomatic officers upon commerce and industries in foreign countries will be printed immediately after their receipt at the Department of State in the form of ADVANCE SHEETS, heretofore issued at intervals as occasion seemed to require. The change to what will practically be the daily publication of these reports, excepting Sundays and legal holidays, has been ordered by the Secretary of State, with the view to the promptest and widest possible distribution of the commercial information obtained by the Department of State for the benefit of the mercantile and manufacturing interests of the United States. The daily edition is intended especially for the use of the newspaper press, which will thus be enabled to obtain the reports in full with the least delay, the boards of trade, chambers of commerce, associations of exporters and manufacturers, and other organized bodies engaged in the development of our foreign commerce, and of individual firms especially interested in obtaining such data without loss of time. The monthly CONSULAR REPORTS, being a reprint of the ADVANCE SHEETS in convenient form for preservation, will be issued as heretofore. Persons applying for CONSULAR REPORTS should state whether the daily or the monthly edition is desired, as duplication will thus be avoided.

The order of the Secretary of State directing the change is as follows:

DEPARTMENT OF STATE,
Washington, December 7, 1897.

The Chief of the Bureau of Foreign Commerce is hereby authorized to print a special edition of consular reports, to be known as ADVANCE SHEETS, CONSULAR REPORTS, to be issued as soon as possible after the receipt of such reports in the Department, for the benefit of trade organizations, business firms, the newspaper press, etc. This edition is to be printed as frequently as practicable in the form of single reports or series of reports to be numbered consecutively.

JOHN SHERMAN,
Secretary of State.

The reasons for the more frequent publication of the CONSULAR REPORTS are explained in a report to the Secretary of State by the

Chief of the Bureau of Foreign Commerce, which is, substantially, as follows:

Department of State,
Washington, December 7, 1897.

Honorable John Sherman,
Secretary of State.

Sir: I have the honor to call your attention to the condition and prospects of the work of this Bureau, formerly the Bureau of Statistics, with the view to its further improvement. The chief function of the Bureau is the collection and publication of diplomatic and consular reports relating to the commerce and industries of foreign countries. Since the publication of the monthly periodical, Consular Reports, was begun in 1880, the operations of the Bureau have undergone a process of gradual development, until now, the Department of State, notwithstanding inadequate resources for this purpose, has become a great agency for the dissemination, by means of its own publications, the newspaper press, and correspondence with trade organizations and individual firms, of fresh and reliable information from all parts of the world as to commercial movements, industrial activity, development of new fields of enterprise and the practical application of inventions and scientific discoveries to agriculture, mining, and processes of manufacture. Five distinct classes of publications are now issued by the Bureau of Foreign Commerce, viz:

I. Commercial Relations of the United States, in two large volumes, being annual reports from consular officers upon trade and commerce, manufacturing and other industries, finance, customs laws, transportation facilities, etc., with special reference to the opportunities for, or obstacles to, the extension of the sales of United States goods abroad. These reports are summarized in an introduction, which is also printed separately in pamphlet form with the title Review of the World's Commerce, for the convenience of those who wish to obtain a comprehensive view of our trade relations with the world at large, rather than to acquaint themselves with facts and figures in detail.

II. Consular Reports, issued monthly, and containing, besides the reports of consular officers, either voluntary or in response to instructions from the Department, a great variety of valuable matter from our diplomatic representatives. It is gratifying to be able to state that there has been a noticeable increase in the activity and interest shown by the embassies and legations, as well as by consular officers, in the collection of useful data for this publication, including statistical documents of foreign governments, which are freely availed of. The effort has been made to restrict

the contents of the monthly issue, as nearly as possible, to matter of practical value to our industries and commerce, for the reason that other Departments and Bureaus of the Government are charged with the publication of much of the information which formerly found its way into the pages of what was expressly intended to be a commercial periodical. Duplication of matter in Government publications and consequent waste and confusion are thus avoided. The contents of the monthly reports, nevertheless, still continue to cover a wide range of subjects. They may be said to describe, with more or less fullness, the industrial activity and progress of the world from year to year. But few, if any, inventions or discoveries of practical importance are omitted in the reports from the leading industrial countries, and a number of instances might be cited of new industries established or improvements in manufacturing processes adopted in the United States as the result of suggestions or information supplied in these monthly reports.

III. ADVANCE SHEETS, CONSULAR REPORTS. These are selected reports, of more immediate interest or importance, from the contents of the monthly issue, which are printed in advance for the benefit of the newspaper press, boards of trade, chambers of commerce and other trade or industrial organizations, bureaus of commercial information, and individual merchants and manufacturers throughout the country, especially such as are engaged in foreign trade.

IV. SPECIAL CONSULAR REPORTS, being series of reports on particular subjects, prepared under special instructions from the Department. The titles of some of them—such as Tariffs of Foreign Countries, Port Regulations in Foreign Countries, Canals and Irrigation, and Money and Prices in Foreign Countries—sufficiently indicate their general character.

V. DECLARED EXPORTS. This is a quarterly publication, giving the articles exported to the United States and their invoice values as declared at the various consulates throughout the world.

For some time past, the fact has been fully recognized that the element of timeliness in getting these reports before the public is of great importance. To this end, every effort has been made to secure the utmost promptitude in publication in the order of their relative value, and in spite of the embarrassment caused until quite recently by an insufficient working force and a meager appropriation, a steady and, I trust, substantial improvement has been effected. Complaints of tardy publication, which, under old conditions, was in many cases unavoidable, are no longer received, and within the past two years, commendation of the celerity with which the reports are printed has come from so many quarters that the Department may be considered as responding satisfactorily to the demands upon it for this class of

information, though the capabilities of its service to commerce and manufactures are still but imperfectly developed.

The actual degree of progress attained is best exemplified by the fact that, as long ago as June, 1895, it had excited the attention of the British chambers of commerce, and, during the past year, it has elicited many complimentary expressions from leading financial, commercial, and industrial journals of Great Britain. In all of these comments, the practical value of the reports of United States consular officers and the promptness with which they are printed and distributed are the points especially dwelt upon. In a circular letter to the chambers of commerce of the United Kingdom, June 19, 1895, the executive council of the associated chambers stated that its attention had been directed "to the action taken by the Government of the United States and by other governments by means of special consular reports, in order to supply their traders with information up to date with regard to openings for business in foreign countries," and the opinion was expressed that the practical value of the reports of British consuls "would be much increased if they afforded more direct and early suggestions and details with respect to trade questions of present interest." The local chambers of commerce were, therefore, invited to make suggestions as to trade inquiries by consuls for submission to the Foreign Office. In the responses to this circular, a variety of changes were proposed for the improvement of the commercial work of the British consular service. At the meeting of the Bradford Chamber of Commerce, the statement was made that United States consuls "did a great deal more" for the extension of trade than British consuls did. The Cardiff chamber complained of the delay in printing the British consular reports. The Hull chamber thought the reports of British consuls should be given to the public as promptly as possible, "if necessary, even by telegraph." The Newport chamber replied to the effect that trained business men should be selected as consuls, and that it was desirable that the system of the United States Government in instructing its consular representatives "to report exhaustively upon trade and commerce, either in their isolated or general phases or developments," should be adopted. These responses were submitted to the British Foreign Office, which, on the 7th of August, 1896, answered the various criticisms and recommendations in an elaborate statement, in which it was asserted that the consular reports were issued "with all possible expedition after their receipt," and that the telegraph was invariably used for the transmission of information of immediate importance. Delays were explained by the statement that reports, after having been put into type, were, whenever possible, returned to the consuls with printers' proofs for correction—a practice, it may be remarked, which is

not followed in publishing the United States consular reports, because of the loss of time necessarily involved. Another reason for the belated character of many of the British reports is to be found in the fact that the consuls do not make their reports, as a rule, oftener than once a year, and even then, they wait until "the necessary statistical data are available in foreign countries." United States consuls, on the other hand, report promptly upon any subject they may think timely and valuable to commerce and industries at home. Even in the preparation of their annual reports, they are required to furnish all the information they can collect from reliable sources by a given date without reference to official statistics, if the latter are not then at hand. This difference in methods would alone serve to explain the elements of superiority in the United States system which seem to commend it so strongly to British trade bodies.

[Here follow extracts from leading trade journals of Great Britain, such as the Iron and Coal Trades Review, March, 1897; the London Financial News, April 17, 1897; the British Trade Review, July 1, 1897; the British Trade Journal, June 1, August 1, and October 1, 1897; the Textile Manufacturer, of Bradford, September 15, 1896; the Consular Journal, of London, September 16, 1897, etc., urging greater promptitude in collecting and publishing British consular reports and the adoption of the salient features of the United States system.]

If we take into consideration the fact that it is only within a recent period that our manufacturers have turned their attention seriously to the export trade and that the consular officers have received the stimulus of such activity, supplemented by special instructions from the Department of State, the results which I have endeavored to indicate would seem to be remarkable. They are such as, in my judgment, foreshadow a great future of usefulness for our diplomatic and consular representatives in extending the sales of every class of American goods, as well as of raw products, abroad. The average American is almost sure to have the business instinct well developed, and added to this is a spirit of enterprise and an energy and dash which give him a great advantage in competition with the slower and more cautious traits of the average European. These are the qualities which, in my judgment, have given the consular service of the United States the superiority so freely admitted by the best opinion in Great Britain. What has actually been accomplished, gratifying though it be, seems to me but an indication of what may easily be done. Thus far, this Bureau has had to work under great disadvantages, and I respectfully call attention to the importance of liberal provision for future development in the interests of American commerce, to which our industries must look for the distribution of their

surplus product. The Bureau, even with its present facilities, has reached the point of reducing, as far as possible, the obstacles and delays to prompt distribution of the information which comes, in steadily increasing volume, from all quarters of the globe. This information is given immediately to the newspaper press, which, through the different news agencies and special correspondents, disseminates the information by telegraph and mail all over the country. The reports are printed as promptly as possible in the monthly publication, CONSULAR REPORTS. A great mass of information is sent out from the Bureau of Foreign Commerce by correspondence in answer to inquiries from individuals and business firms. This latter branch of the work has developed so greatly that the Bureau feels the need of a competent staff to classify data and respond to such inquiries with the least delay. A Division of Information is one of the pressing necessities of the work.

For the present, however, I confine myself to a recommendation which will enable the Bureau to still further minimize the delay in printing and circulating the reports. By a simple and inexpensive change in the methods of publication, it will be possible to print the reports day by day as they come into the Department, and issue them promptly for the benefit of the newspaper press and trade bodies, as well as individual manufacturers and merchants, who are constantly writing to the Department for advance copies of particular reports. It has been the practice of the Bureau, for some time, to issue those of the reports which are of more immediate value in the form of ADVANCE SHEETS, for the special benefit of the classes indicated above. It is difficult, however, to determine in advance the extent of the demand for any particular report, and in order that all requests may be complied with without inconvenience or delay, I have the honor to request your approval of the accompanying order, which authorizes this Bureau to print all reports, as they are received, in a special edition to be known as ADVANCE SHEETS, CONSULAR REPORTS. These ADVANCE SHEETS can be numbered consecutively, with titles by subjects, and by means of a card catalogue, it will be possible to respond to a demand for a particular report at any time. The reports, at the end of each month, can easily be collected and classified for printing in the monthly form, as at present. This latter publication would still be useful for reference purposes and for all those who do not attach importance to the early receipt of the data it contains.

The proposed change involves an increased cost of only about twelve hundred dollars per annum, owing to the fact that the additional expense will be merely that of paper and presswork, and, perhaps, additional help in the mailing department. The change, on

the other hand, will insure economy and promptness in answering requests for information and in supplying the newspaper press (a most important agency for the distribution of this information) with the full reports of the consuls at the earliest possible moment, and will encourage consular officers, by the speedy publication of their reports, to put forth their best efforts in this direction. As to the latter result, I may remark that the increase of interest among consular officers in the commercial work of the Department is very perceptible of late, and that the annual reports to be printed in COMMERCIAL RELATIONS, which I hope to have ready by the 1st of January, 1898, promise to be superior to any that have yet been obtained. If the proposed system be adopted, I am satisfied that the Department will have exhausted the possibilities of prompt publication and efficient distribution of commercial reports, and that we need fear no possible rivalry on this point from any of our competitors for foreign trade. If the present work of the consular service in transmitting commercial information by mail could be supplemented by the use of the cable when necessary, in order to advise American manufacturers and merchants of important events in industry and commerce, nothing, it seems to me, would be left to be desired in this branch of the work. It will, of course, be for Congress to determine whether provision shall be made for such extension of the present system, and also for additional facilities which are sorely needed for the development of other features of the work.

Respectfully yours,

FREDERIC EMORY,
Chief, Bureau of Foreign Commerce.

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VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to April 1, 1898, have been prepared to assist in computing the values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz, (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*.	Gold and silver	Peso	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†	Gold	Crown	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver	Franc	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil	Gold	Milreis	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	do	Dollar	1.00	
Chile	do	Peso	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica	do	Colon	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver	do	.92,6	Gold—doubloon ($5.01,7); silver—peso.
Denmark	Gold	Crown	.26,8	Gold—10 and 20 crowns.
Egypt	do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland	do	Mark	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver	Franc	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark	.23,8	Gold—5, 10, and 20 marks.
Great Britain	do	Pound sterling	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece	Gold and silver	Drachma	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	do	Gourde	.96,5	Silver—gourde.
Italy	do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Japan‡	Gold	Yen	.49,8	Gold—1, 2, 5, 10, and 20 yen.
Liberia	do	Dollar	1.00	
Netherlands§	Gold and silver	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar	1.01,4	Gold—$2 ($2.02,7).
Portugal	do	Milreis	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖	do	Ruble	.77,2	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain	Gold and silver	Peseta	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway	Gold	Crown	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver	Franc	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela	Gold and silver	Bolivar	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

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* In 1874 and 1875, the gold standard prevailed in the Argentine Republic.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ended July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

‡ For particulars as to the change from silver to the gold standard, see CONSULAR REPORTS No. 201, p. 259.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

‖ Russia: Gold the nominal standard; silver the actual standard.—*Note by the United States Treasury.* See, also, review of Russian industries and commerce by the Russian Minister of Finance in "Review of the world's commerce," Commercial Relations of the United States for 1895–96, p. 230.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do.	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do.	Peso	.96,5	.91,8	.91,8	.83,6	....	....
China	Silver	Haikwan tael	1.61	1.61	....	....	....	....
Colombia	do.	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do.	do.	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	....	....	4.97,4	4.97 4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	....	....
	Silver		....	....	....	....	.87,6	.86,9
Mexico	do.	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	....	....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do.	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do.	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do.	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do.	Peso	....	....	....	.69,9	.68	.85
Colombia	do.	do.	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do.	do.	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	....	....	.99,7	.99.7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do.	Dollar	.86,4	.81,6	.79	.75,9	.73,9	92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do.	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do.	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

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* The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

† The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1895.				1896.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.45,5	$0.44,1	$0.48,6	$0.48,6	$0.49,1	$0.49,3	$0.49,7	$0.49
Central America.	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
China	Amoy tael	...	...	...	...	...	...	...	.79,3
	Canton tael	...	...	...	...	...	...	...	.79
	Chefoo tael	.70,4	.68,3	.75,1	.75,2	.75,9	.76,3	.76,9	.75,8
	Chinkiang tael	...	...	...	...	...	...	...	.77,4
	Fuchau tael	...	...	...	...	...	...	...	.73,3
	Haikwan tael	.74,9	.75,6	.80	.80	.80,8	.81,2	.81,9	.80,6
	Hankow tael	...	...	...	...	...	...	...	.74,2
	Ningpo tael	...	...	...	...	...	...	...	.76,2
	Niuchwang tael.	...	...	...	...	...	...	...	.74,3
	Shanghai tael	.67,3	.65,2	.71,8	.71,8	.72,5	.72,9	.73,5	.72,4
	Swatow tael	...	...	...	...	...	...	...	.73,2
	Takao tael	...	...	...	...	...	...	...	.79,8
	Tientsin tael	.71,4	.69,2	.76,1	.76,2	.76,9	.77,3	.78	.76,8
Colombia	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Ecuador	do.	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
India	Silver rupee	.21,6	.21	.23,1	.23,1	.23,3	.23,4	.23,6	.23,3
Japan	Silver yen	.49,1	.47,6	.52,4	.52,4	.52,9	.53,2	.53,2	.52,8
Mexico	Silver dollar	.49,5	.47,9	.52,8	.52,8	.53,3	.53,6	.54	.53,2
Persia	Silver kran	...	...	.08,9	.09	.09	.09,1	.09,2	.09
Peru	Silver sol	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Russia	Silver ruble	.36,4	.35,3	.38,9	.38,9	.39,3	.39,5	.39,8	.39,2
Tripoli	Silver mahbub	.41,1	.39,8	.43,8	.43,8	.44,3	.44,5	.44,9	.44,2

Countries.	Monetary unit.	1897.				1898.	
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.
Bolivia	Silver boliviano.	$0.47,4	$0.46,8	$0.44,3	$0.41,2	$0.42,4	$0.40,9
Central America	Silver peso	.47,4	.46,5	.44,3	.41,2	.41,4	.40,9
China	Amoy tael	.76,7	.75,7	.71,7	.66,4	.68,5	.66,2
	Canton tael	.76,5	.75,5	.71,5	.66,4	.68,3	.66
	Chefoo tael	.73,3	.72,4	.68,6	.63,7	.65,5	.63,3
	Chinkiang tael	.74,9	.73,9	.70	.65,1	.66,9	.64,6
	Fuchau tael	.70,9	.70	.66,3	.61,6	.63,4	.61,2
	Haikwan tael	.78	.77	.73,1	.67,8	.69,7	.67,3
	Hankow tael	.71,7	.70,8	.67,1	.62,3	.64,1	.61,9
	Ningpo tael	.73,7	.72,8	.68,9	.64	.64,3	.63,6
	Niuchwang tael.	.71,9	.71	.67,2	.62,5	.65,9	.62
	Shanghai tael	.70	.69,1	.65,5	.60,8	.62,6	.60,4
	Swatow tael	.70,8	.69,9	.66,2	.61,5	.63,3	.61,1
	Takao tael	.77,2	.76,2	.72,2	.67	.66	.66,6
	Tientsin tael	.74,3	.73,4	.69,5	.64,6	.66,4	.64,1
Colombia	Silver peso	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9
Ecuador	do.	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9
India *	Silver rupee	.22,5	.22,2	.21,1	.19,6	.20,1	.19,1
Japan	Silver yen	.51,1	.50,5	...	...	...	...
Mexico	Silver dollar	.51,5	.50,8	.48,2	.44,6	.46	.44,4
Persia	Silver kran	.08,7	.08,6	.08,2	.07,6	.07,8	.40,9
Peru	Silver sol	.47,4	.46,8	.44,3	.41,2	.42,4	...
Russia	Silver ruble	.37,9	.37,4	...	...	...	...
Tripoli	Silver mahbub	...	...	...	...	...	...

* The value of the rupee to be determined by consular certificate.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in Consular Reports and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Dun	Japan	1 inch.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	4 yards.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Kota	Japan	5.13 bushels.
Korree	Russia	3.5 bushels.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	11⅜ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅝ acres.
Do	Nicaragua and Salvador	1.727 acres.
Marc	Bolivia	0.507 pound.
Maund	India	$82\frac{2}{7}$ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Milla	Nicaragua and Honduras	1.1493 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	3.6 feet.
Seer	India	1 pound 13 ounces.
Shaku	Japan	10 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.
Vara	Argentine Republic	34.1208 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Castile	0.914117 yard.
Do	Central America	32.87 inches.
Do	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

Vol. LVII. JULY, 1898. No. 214.

CUBA AND PUERTO RICO.

In response to the demand for information in regard to the Spanish West Indies, the following summary by the Bureau of Foreign Commerce, which will appear in the forthcoming edition of the Review of the World's Commerce, 1896–97, is printed separately in this form:

CUBA.

Consul Hyatt, of Santiago de Cuba, in a report dated January 8, 1897, and printed in CONSULAR REPORTS No. 197 (February, 1897), p. 262, says that the area of Cuba is about equal to that of the State of Pennsylvania, the length being 775 miles and the width varying from 30 to 160 miles. The productive soil, mineral wealth, and climatic conditions of the island entitle it to rank among the foremost communities of the world. The soil is a marvel of richness, and fertilizers are seldom used, unless in the case of tobacco, even though the same crops be grown on the same land for a hundred years, as has happened in some of the old sugar-cane fields. The mountains are of coral formation, while the lowlands of eastern Cuba at least seem to be composed largely of fossils of sea matter from prehistoric times and are extremely rich in lime and phosphate, which accounts for their apparent inexhaustibleness.

Although founded and settled more than fifty years before the United States, Cuba has still thousands of acres of primeval forests; mahogany, cedar, logwood, redwood, ebony, lignum-vitæ, and caiguaran (which is more durable in the ground than iron or steel) are among the woods.

If all the land suitable to the growth of sugar cane were devoted to that industry, it is estimated that Cuba might supply the entire Western Hemisphere with sugar. The island has already produced in a single year for export 1,000,000 tons, and its capabilities have only been in the experimental stage. The adaptability of the soil for tobacco culture has long been known. Cuba takes great pride in the quality of her coffee, and until the war the plantations were flourishing.

The land is not suited to the cultivation of cereals. No flour mill, Mr. Hyatt thinks, exists on the island. The consul continues:

> In mineral wealth Cuba is capable of taking high rank. Gold and silver have not been found in paying quantities. Copper was mined at Cobre by the natives before Columbus discovered the island, and there is strong proof that native copper was carried across to Florida and used by the Florida Indians hundreds of years ago. The mound-builders of that State buried with their dead copper ornaments and utensils hammered from native copper, which always has an admixture of more or less foreign matter. As no copper ore is found in Florida, or in the United States for a long distance from there, and as that found in the United States or in Mexico does not correspond chemically with that buried with the mound-builders, it occurred to Prof. R. H. Sanders, of the Academy of Natural Sciences, in Philadelphia, that it was possible that these mound-builders had water communication with Cuba, and got their copper from here. He therefore communicated with the writer and procured a sample of native Cuban copper, which proved, upon analysis, to be identical with that used in the copper ornaments mentioned. In the early part of the present century some English capitalists purchased these mines, which are 9 miles from Santiago. The books of this consulate show that from 1828 to 1840 an average of from $2,000,000 to $3,000,000 worth of copper ore was shipped annually to the United States from these mines. How much was shipped elsewhere, I have not the means of knowing.
>
> These mines continued in successful operation until 1867, when a combination of circumstances, and not the poverty of the mines, closed them up, and the various shafts, from 900 to 1,200 feet deep, filled with water, all save 300 feet being below the level of the sea. In later years considerable copper was taken from these mines by pumping the water from the shafts to tanks, into which iron scraps were thrown. The copper held in solution by the water deposited on the scrap iron, which in time was broken off and the iron used again. It is generally believed that large quantities of copper still remain unmined in this locality.
>
> The iron mines of Cuba, all of which are located near Santiago, overshadow in importance all other industries on the eastern end of the island, constituting the only industry that has made any pretense of withstanding the shock of the present insurrection. The Juragua and Daiquiri iron companies (American), with a combined capital of over $5,000,000, now operate mines in this vicinity and employ from 800 to 1,400 men, shipping to the United States from 30,000 to 50,000 tons of iron ore per month, the largest portion of which is used at Bethlehem, Steelton, Sparrows Point, and Pittsburg, The ore of these mines is among the richest in the world, yielding from 62 to 67 per cent of pure iron, and is very free from sulphur and phosphorus. There are numerous undeveloped mines of equal value in this region.
>
> In the Sierra Maestra range, on the southern coast of Cuba, from Santiago west to Manzanillo, within a distance of about 100 miles, are found numerous deposits of manganese, an ore indispensable in the manufacture of steel. American capital opened a mine about 20 miles distant, at a place called Ponupo, and built a railroad to it. After shipping one cargo, the mines were stopped by the insurgents. As nearly all the manganese used in the United States comes from the Black Sea regions of Europe and a smaller quantity from the northern part of South America,

it is but reasonable to suppose that the products of these near-by mines will be in great demand when the conditions are such that they can be operated in safety.

Railroads and other highways, improved machinery, and more modern methods of doing business are among the wants of Cuba; and with the onward march of civilization these will doubtless be hers in the near future. Cuba, like other tropical and semitropical countries, is not given to manufacturing; her people would rather sell the products of the soil and mines and buy manufactured goods. The possibilities of the island are great, while the probabilities remain an unsolved problem.

POPULATION.

In 1887, the number of inhabitants was estimated at 1,631,687.

COMMERCE.

A British Foreign Office report* from Madrid (Annual Series, No. 1851, 1897) gives the value of the imports of Cuba during the fiscal year ending April, 1896, as $66,166,754 and of the exports as $94,395,536.

The trade of the United States with Cuba since 1891 is given as follows by the Bureau of Statistics, Treasury Department:

Description.	1891.	1892.	1893.	1894.	1895.	1896.	1897.
Imports:							
Free	$26,044,502	$66,140,835	$66,049,369	$67,418,289	$17,684,765	$2,074,763	$1,270,059
Dutiable	35,669,893	11,790,836	12,657,137	8,259,972	35,186,494	37,942,967	17,136,756
Total	61,714,395	77,931,671	78,706,506	75,678,261	52,871,259	40,017,730	18,406,815
Exports:							
Domestic	11,929,605	17,622,411	23,604,094	19,855,237	12,533,260	7,312,348	7,599,757
Foreign	295,283	331,159	553,604	270,084	274,401	218,532	660,019
Total	12,224,888	17,953,570	24,157,698	20,125,321	12,807,661	7,530,880	8,259,776

The commerce of Spain with Cuba since 1891, the figures up to 1895 being taken from a compilation by the Department of Agriculture† and those for 1896 from a British Foreign Office report (Annual Series, No. 2065, 1898), was:

Description.	1891.	1892.	1893.	1894.	1895.	1896.
Imports from Cuba	$7,193,173	$9,570,399	$5,697,291	$7,265,120	$7,176,105	$4,257,360
Exports to Cuba	22,168,050	28,046,636	24,689,373	22,592,943	26,298,497	26,145,800

The trade of Mexico with Cuba during the fiscal year ending June 30, 1897, was: Imports from Cuba, $363; exports to Cuba, $26,700. The commerce of the island with the principal European countries can not be given with accuracy, as the various official statistics include Puerto Rico in the statements of trade—the figures for Germany comprising other Spanish dependencies as well. The commerce of the United Kingdom, France, and Belgium with Cuba and Puerto Rico in 1896 was as follows, the figures for the United States and Spain for the same year being stated for comparative purposes:

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*Reports by United States representatives on commercial conditions in Cuba and Puerto Rico have been meager for the past two years, owing to the absorption of the consular officers in the political conditions in the islands.

†Spain's Foreign Trade, Frank H. Hitchcock, 1898.

Country.	Imports.	Exports.
United Kingdom	$174,187	$5,843,892
Belgium	208,304	1,089,239
France	3,338,900	424,600
United States	42,314,383	9,632,974
Spain	9,681,120	33,474,680

The trade in the principal articles with the United States in 1893 (when it reached its maximum of value since 1874) and in 1897 was:

Principal imports from Cuba into the United States.

Articles.	1893.	1897.
Free of duty:		
Fruits, including nuts	$2,347,800	$154,422
Molasses	1,081,034	5,448
Sugar	60,637,631	
Wood, unmanufactured	1,071,123	63,670
Dutiable:		
Tobacco—		
Unmanufactured	8,940,058	2,306,067
Manufactured	2,727,030	1,971,214
Iron ore	641,943	475,281
Sugar		11,982,473

Principal exports from the United States to Cuba.

Articles.	1893.	1897.
Wheat flour	$2,821,557	$564,638
Corn	582,050	247,905
Carriages and street cars and parts of	316,045	3,755
Cars, passenger and freight, for steam railroads	271,571	9,202
Coal	931,371	638,912
Locks, hinges, and other builders' hardware	395,964	49,386
Railroad bars, or rails, of steel	326,654	14,650
Saws and tools	243,544	34,686
Locomotives	418,776	20,638
Stationary engines	130,652	1,189
Boilers and parts of engines	322,284	35,578
Wire	321,120	35,905
Manufactures of leather	191,394	39,753
Mineral oil	514,808	306,916
Hog products	5,401,022	2,224,485
Beans and pease	392,962	276,635
Potatoes	554,153	331,553
Boards, deals, planks, joists, etc	1,095,928	286,387
Household furniture	217,126	34,288

The British consul-general at Habana, Mr. Gollan (Foreign Office, Annual Series No. 1880, 1897), gives the following table, showing the chief articles of import into Cuba in 1896:

Articles.	From—		Total value.
	Europe.	America.	
Butter ... cases	6,338	54	$319,700
Cheese ... do	1,881	44,358	323,673
Rice ... cwts	853,538	23,800	2,807,481
Beer ... barrels	4,629	2,860	82,379
Do ... cases	6,574	2,044	43,090
Salt fish ... drums	5,036	79,521	686,000
Flour ... bags	404,019	100,321	4,285,522
Coal ... tons	29,050	180,487	2,085,370
Potatoes ... barrels	53,083	231,774	996,702
Maize ... bags	...	97,303	467,049
Lard ... cwts	...	194,308	2,078,811
Total	...	...	14,175,777

The tobacco crop on an average, says the consul-general, is estimated at 560,000 bales (1 bale=110 pounds), 338 bales being exported and the remainder used in cigar and cigarette manufacture in Habana. The cigars exported in 1896 numbered 185,914,000. Tobacco leaf exported in 1895, 30,466,000 pounds; in 1896, 16,823,000 pounds; the decrease being due to a decree of May, 1896, forbidding tobacco-leaf exports except to Spain. About 80,000 of the inhabitants are ordinarily engaged in the cultivation of tobacco.

SUGAR INDUSTRY.

The British consul-general gives the following details in regard to the sugar trade in 1895 and 1896:

Description.	Quantity.	
	1895.	1896.
	Tons.	*Tons.*
Exports	832,431	235,628
Stocks	135,181	36,260
	967,612	271,888
Local consumption	50,000	40,000
	1,017,612	311,888
Stock on January 1 (previous crop)	13,348	86,667
Total production	1,004,264	225,221
Decrease in 1895-96	779,043	
Equivalent to	77.574 per cent.	

Mr. Gollan adds:

> Cuba in normal times may be said to be one of the most favored countries of the world for the economical production of sugar. The present condition of affairs

greatly burdens the sugar industry, owing to the necessity of protecting the estates, the loss of cane through incendiary fires, and the difficulty at all times of getting enough hauled to the works to use them to their full capacity.

Under normal conditions the contrast between the Cuban industry and that of the West Indian Islands, or any American sugar-producing country, is remarkable. The total sugar crop of any other island is equal only to the output of three or four of the largest Cuban manufactories, and, with the exception of Demerara, all these countries show considerable inferiority to Cuba in methods of manufacture and in the class of machinery in use. The neglect of the other West Indian planters to advance with the times is the main cause of this lack of prosperity at the present moment. Of the other cane-sugar countries of the world, Java is the only one which comes within 50 per cent of the amount of sugar produced annually in Cuba in normal times, and Java and the Hawaiian Islands are the only ones which are generally advanced in the process of manufacture.

Until a very recent date the manufacture of sugar and the growing of the cane in Cuba were extremely profitable undertakings, and the reasons for their prosperity may be stated as—

(1) The excellence of the climate and the fertility of the soil, which allow of large crops of good cane. The rainfall, about 50 inches, is so distributed that irrigation is not a necessity, though it would in many cases be advisable.

(2) The great movement toward the centralization of the estates which took place in the early eighties; planters having understood the value of large sugar-houses and overcome their difficulty in this way.

(3) The proximity of the United States, affording, as it does, a cash market for the sugar.

In spite of the above advantages, continues the consul-general, the size of the sugar crop is a matter of surprise to many, while elsewhere the industry must be fostered by bounties. The agricultural adaptability of the country, however, counts for much; the cost of labor is low, and the sugar houses have a larger daily capacity than those of any other country.

The exports of sugar to Spain during the three years ending in 1896 are given as follows in a British Foreign Office report (Annual Series, No. 1851, 1897):

	Tons.
1894	24, 240
1895	26, 991
1896	14, 642

It should be noted that during the same period the exports of sugar from Puerto Rico to Spain increased from 13,000 to 18,000 tons.

DEBT.

On July 31, 1895, the debt of Cuba was estimated at $295,707,264 (see Report of the Committee on Foreign Relations on Affairs in Cuba, United States Senate, No. 885, Fifty-fifth Congress). The interest on the debt imposes a burden of $9.79 per inhabitant.

RAILWAYS.

According to a report published in Special Consular Reports, "Highways of Commerce," there are ten railway companies in Cuba, the most important being the Ferrocarriles Unidos; upward of 1,000 miles of main line belong to these companies, and there are, besides, private branch lines to all the important sugar estates. The Ferrocarriles Unidos has four lines, connecting Habana with Matanzas, Batabano, Union, and Guanajay. The roads pass through the most populous part of the country and connect Habana with other lines.

The Western Railway was begun some forty years ago, and in 1891, when it was acquired by an English company, had reached Puerto de Golpe, 96 miles from Habana and 10 miles from Pinar del Rio, the capital of the province of that name and the center of the tobacco-growing district. The line has been completed to Pinar del Rio, and improvements have been made in the old part, many of the bridges having been replaced by new steel ones, the rails renewed, modern cars put on, etc.

The other companies are: Ferrocarriles Cardenas–Jacaro, the main line of which joins the towns of Cardenas and Santa Clara; Ferrocarril de Matanzas, having lines between Matanzas and Murga, and also between Matanzas and Guareiras; Ferrocarril de Sagua la Grande, running between Concha and Cruces; Ferrocarril Cienfuegos–Santa Clara, connecting those towns; Ferrocarriles Unidos de Caibarien, from Caibarien to Placetas; Ferrocarril de Puerto Principe–Nuevitas; Ferrocarril de Guantanamo.

The Marianao Railway also belongs to an English company, with headquarters in London. The original line, belonging to Cubans, was opened in 1863, but liquidated and was transferred to the present owners. The line, only 8½ miles in length, runs from Habana to Marianao, with a branch line to a small village on the coast. During 1894, over 750,000 passengers were carried, this being the chief source of revenue. The carriages are of the American type and are fitted, as well as the locomotives, with the Westinghouse automatic brake; the rails are of steel, weighing 60 pounds per yard.

PORTS, INTERIOR TRANSPORTATION, ETC.

There are fifty-four ports, of which fifteen are open to commerce, and nineteen light-houses.

The national carriage is the volante, and no other is used in the country. It consists of a two-seated carriage, slung low down by leather straps from the axle of two large wheels, and has shafts 15 feet long. The horse in the shaft is led by a postilion, whose horse is also harnessed to the carriage with traces. In case of a long and rough journey, a third horse is harnessed on the other side of the shafts in the same manner. The carriage is extremely comfortable to travel in, and the height of the wheels and their distance apart prevent all danger of turning over, although the roads in the country are, for the most part, mere tracks through fields and open land.

Ox carts and pack mules are used for conveying goods in the interior of the island, outside of the railway lines.

CABLES.

There are four cable lines connected with Cuba: the International Ocean Telegraph Company has a cable from Habana to Florida; the Cuban Submarine Company has a cable connecting Habana with Santiago de Cuba and Cienfuegos; the West India and Panama Company has a cable connecting Habana with Santiago de Cuba, Jamaica, Puerto Rico, the Lesser Antilles, and the Isthmus of Panama; the Compagnie Française de Cables Sous-Marins has a line connecting Habana with Santiago de Cuba, Haiti, Santo Domingo, Venezuela, and Brazil.

The only three towns in Cuba having cable connections are Habana, Cientuegos, and Santiago de Cuba.

TELEGRAPHS, TELEPHONES, ETC.

The telegraph and telephone systems in Cuba belong to the Government, but the latter is farmed out for a limited number of years to a company called the Red Telefonica de la Habana. Nearly all the public and private buildings in the city and suburbs are connected by telephone. The Statesman's Year Book, 1898, says that there are 2,300 miles of telegraph line with 153 offices; messages in 1894, 357,914.

CITIES.

The following descriptive matter is taken from data furnished to the Department by consular officers in 1896:

Habana.—Habana, the capital city of the province of the same name and of the island of Cuba, is situated on the west side of the Bay of Habana (formerly called Carenas), on a peninsula of level land of limestone formation, in latitude 23° 8′ north, and longitude 82° 22′ west, and is on the narrowest part of the island. It is the seat of the general government and captaincy-general, superior court of Habana (audiencia), general direction of finance, naval station, arsenal, observatory, diocese of the bishopric, and the residence of all the administrative officers of the island (civil, military, maritime, judicial, and economic). It is over 3,500 miles from Cadiz, 1,240 miles from New York, and 90 miles from Key West. Its strategic position at the mouth of the Gulf of Mexico has aptly given it the name of the Key of the Gulf, and a symbolic key is emblazoned in its coat of arms. The entrance to the harbor, guarded on one side by the Morro and the frowning heights of La Cabaña Fort and on the other by the Punta and Reina batteries, is narrow, but expands into a wide and deep harbor, where a thousand ships can safely ride. Habana, is or was, a strongly fortified place, surrounded by imposing fortifications, such as the Cabaña, Morro Castle, Castillo del Principe, Fort Atarés, Punta, Reina Battery, and Fort No. 4. The streets are generally narrow in the older part of the city, but outside the walls are many wide avenues. The city also contains many notable buildings, as the Cathedral, formerly a Jesuit convent, now the depository of the ashes of the immortal discoverer of America; the palace of the government, fine private residences, public parks, and statues of Columbus, Fernando VII, Isabel III, etc. Habana has also its university, institute, seminary, theological and normal schools, academy of painting and sculpture, asylums; civil, military, and private hospitals; several theaters, the principal one, Tacon, being widely celebrated; a number of clubs, political, social, etc.; societies of instruction and recreation, large markets, a system of magnificent waterworks, an extensive and beautiful cemetery, sea baths, etc. Along the coast are summer places of resort, connected with the city by lines of horse and steam cars. There are many churches and convents; a commemorative chapel fronts the palace close to a large ceiba tree, under which Diego Velasquez, the founder of the city, celebrated mass in 1519. There are numerous cigar and cigarette factories, tanneries, manufactories of sweetmeats, rum, candles, gas, beer, carriages, soap, perfumery, glycerin, etc. The population of Habana, from the last official estimate, is about 220,000. Its principal exports to the United States consist of tobacco, fruit, wax and honey, sugar, and molasses. All kinds of breadstuffs, lumber, coal, and machinery are imported from the United States. The climate is generally warm and humid, and marked by two clearly defined seasons—the wet and dry, the former ranging from June to December, September and October being considered the hurricane months. The trade winds blow generally with great regularity, and the heat of the day is cooled by evening breezes.

Matanzas.—The city is beautifully situated on Matanzas Bay, on the north coast of Cuba, 60 miles east of Habana. It is divided into three parts by rivers, the principal business part occupying the central portion and extending west 1½ miles. The chief warehouses, distilleries, and sugar refineries are on the south of the river San Juan, easily accessible to railroads and lighters. The population is 49,384, and that of Matanzas Province 271,000, according to the 1893 census. The principal industries are rum distilling, sugar refining, and manufacture of guava jelly. There are railroad-car and machine shops. Sugar and molasses are sent to the United States, amounting, from 1891 to 1895, to $59,988,497. The climate is fine, and Matanzas is considered the healthiest city on the island. With proper drainage and sanitary arrangements, yellow fever and malaria would be almost unknown.

Santiago de Cuba.—Santiago de Cuba, the second city in size on the island, is probably the oldest city of any size on this hemisphere, having been founded by Velasquez in 1514. It fronts on a beautiful bay 6 miles long and 2 miles wide, on the southeastern coast of Cuba, 100 miles west of Cape Maysi. The population in 1895 was 59,614. The mean temperature in summer is 88°; in winter, 82°. It is regarded as very unhealthy, yellow fever being prevalent throughout the year and small pox epidemic at certain times. These conditions are due to the lack of sanitary and hygienic measures; all refuse matter, as well as dead dogs, cats, chickens, etc., being thrown into the streets to decay and fill the air with disease germs. A railroad, called the Sabanilla and Marote, runs from the city to San Luis, 25 miles distant, with a branch to Alto Songo, 12 miles in length. It is largely owned and controlled by citizens of the United States. Santiago is the headquarters for three large mining plants owned by United States citizens, viz, the Jurugua, the Spanish American, and the Sigua, together representing the investment of about $8,000,000; the last named are not in operation. Santiago is the capital of the province and oriental region. There are a number of tobacco factories, but the chief business is the exportation of raw materials and the importation of manufactured goods and provisions. Sugar, iron ore, manganese, mahogany, hides, wax, cedar, and tobacco are exported to the United States.

Cienfuegos.—Cienfuegos is on a peninsula in the Bay of Iagua, 6 miles from the sea. The depth of water at the anchorage in the harbor is 27 feet, and at the different wharves from 14 to 16 feet. The commercial importance of the place was recognized some forty years ago, and has increased with the development of the sugar industry. This port is now the center of the sugar trade for the south of the island. It is connected by rail with Habana and the principal points on the north of the island. The population in 1895 was 24,030. Sugar and tobacco are exported to the United States, and soap and ice are manufactured. The climate from December 1 until May is dry and moderately warm, the temperature ranging from 60° to 78° during the day and falling several degrees at night. At this season almost constant winds prevail from the northeast or northwest, accompanied by clouds of dust. For the rest of the year the temperature ranges from 75° to 93°, descending a few degrees at night.

During this season there are frequent and heavy rainfalls and windstorms. The yellow fever is then epidemic. But little attention is given by the municipal authorities to hygiene or to sanitary measures. Water for household purposes is insufficiently supplied by two small plants, the principal source being the Jicotea River, 10 miles distant. The death rate is 42.82 per 1,000.

Cardenas.—Cardenas is a seaport on the north coast of Cuba, about 135 miles east of Habana. In 1893 it had 23,517 inhabitants. The temperature is pleasant during the winter, but from about the middle of May to the middle of October the weather is hot and sultry, the thermometer during the day being usually 94° in the shade and falling some 5° at night. Sanitary conditions are bad. Yellow fever, typhus, typhoid, and pernicious fevers prevail throughout most of the year, being worse in the hot season. Cases of small pox also appear at times. Sugar is the chief article of export. The total exports to the United States in the fiscal year 1895-96 were $2,920,905; of this, sugar represented $1,872,626. About half the imports are from the United States.

Trinidad de Cuba.—Trinidad de Cuba is located on the slope of the mountain called La Vijia (Lookout), which has an elevation of about 900 feet above sea level. The port, Casilda, lies about 1 league to the south; the harbor is almost landlocked and has very little depth. Vessels drawing 10 feet 6 inches are liable to run aground with the least deviation from the tortuous channel. About half a mile west of Trinidad is the River Guarabo, navigable for small boats only. Four miles east lies Masio Bay, which will accomodate deep-draft vessels. The population numbers about 18,000. Sugar and a little honey are exported. The climate is very healthy, the death rate being 21 to 26 per 1,000, though sanitary measures are almost unknown. The town is so situated that the heavier it rains the cleaner it becomes. The town and vicinity are considered the healthiest in Cuba.

Sagua la Grande.—The city is situated on the Sagua River, 11 miles from the port. The export trade is confined almost exclusively to sugar. The population is about 18,000, and the climate and sanitary arrangements are superior to those of most Cuban towns.

Baracoa.—Baracoa, on the extreme eastern part of the island, on the north side, contains about 7,000 inhabitants under normal conditions. Its chief industry is the grinding of cocoanuts to extract oil. There are two establishments with a capacity of 30,000 cocoanuts daily, employing about 50 workmen. There is also a petroleum refinery (closed at present) and a chocolate factory. Bananas and cocoanuts are exported to the United States ($628,811 worth in 1895), Norwegian steamers being employed because of their cheapness as compared with United States vessels. The climate is pleasant, the average-temperature being 78°; the winds prevailing during the summer are from the southeast.

Manzanillo.—Manzanillo, in the province of Santiago de Cuba, is situated on the inner part of the bay of the same name. The population, when the war broke out, numbered from 10,000 to 12,000. Exports to the United States consist chiefly of sugar, cedar, mahogany, tobacco, palm leaves, hides, etc.

Guantanamo.—The population numbers about 7,000. The city is situated 15 miles from the bay, with which it is connected by rail. The raising of sugar and coffee are the chief industries of the vicinity. Sugar and lumber are exported to the United States. The climate, cool in winter, is very warm in summer.

Santa Cruz del Sur.—Santa Cruz del Sur is situated immediately in front of the sea, the houses being sometimes touched by the waves when the tide is high. There is but one street, which extends from east to west, and is about 1¼ miles in length. The ground behind the houses is swampy and impassable. The population numbers about 1,500. Cedar, mahogany, honey, and wax are shipped to the United States to the annual value of $300,000 to $400,000. The climate may be called good, when the bad situation of the town and the lack of sanitary measures are considered. For several years there had been no case of yellow fever, but with the arrival of the Spanish troops it developed and spread widely, owing to the utter lack of hospitals and medical assistance. As soon as the troops were removed, however, the disease disappeared and the health has been good since that time, with the exception of some few cases of paludic fever, to which, it seems, the climate is inclined.

Zaza.—Tunas de Zaza is quite a small place, the population, including the part called "Magano," being about 1,500. It is the terminus of the Tunas and Sancti Spiritus Railway, springing up when the road was opened some forty years ago and having made but little progress since. Land in the neighborhood is unfit for agricultural purposes, and the supply of vegetables has to be brought by rail or boats. Water is very scarce, there being only a few badly built cisterns. Water is brought in tanks by the railway company and sold to the public at a high price; it is not always on hand, and at times there is a dearth for several days. There is a small tannery, with no modern accessories, having not even an improved mill for grinding bark. Exports consist of sugar, cedar, mahogany and other lumber, tobacco, wax, and honey. The climate in winter is pleasant, warm in the day and cool of evenings; in summer, as a rule, it is warm. There is very little sickness in the locality. Cattle raising is an important industry of the province.

PUERTO RICO.

The island of Puerto Rico, according to a recent report of the British consul (Foreign Office, Annual Series, No. 1917, 1897), has an extent of about 3,668 square miles—35 miles broad and 95 miles long. The Statesman's Year Book, 1898, gives the population (1887) at 813,937, of which over 300,000 are negroes. There are 470 miles of telegraph and 137 miles of railway, besides 170 miles under construction. According to a report by United States Consul Stewart, of San Juan (printed in Highways of Commerce), there are about 150 miles of good road on the island. Elsewhere, transportation is effected on horseback. The British report above referred to says that the telephone systems of San Juan, Ponce, and Mayaguez have recently been contracted for by local syndicates. In Ponce, a United States company obtained the contract for the material. There are one hundred stations already connected, and it is expected that two hundred more will be in operation shortly. There have been recent harbor improvements in San Juan.

COMMERCE.

The Estadística General del Comercio Exterior, Puerto Rico, 1897, gives the following figures (the latest published) in regard to the trade of the island in 1895:

Imports of principal articles.

Articles.	Value.*	Articles.	Value.*
Coal	$119,403	Flour	$982,222
Iron	224,206	Vegetables	192,918
Soap	238,525	Olive oil	327,801
Meat and lard	1,223,104	Wine	305,656
Jerked beef	135,616	Cheese	324,137
Fish	1,591,418	Other provisions	171,322
Rice	2,180,004	Tobacco (manufactured)	663,464

* United States currency.

Exports of principal articles.

Articles.	Value.*	Articles.	Value.*
Coffee	$8,789,788	Sugar	$3,747,891
Tobacco	646,556	Honey	517,746

* United States currency.

The value of the total imports was $16,155,056, against $18,316,971 for the preceding year. The exports were valued at $14,629,494, against $16,015,665 in 1894. The principal increases in imports, as compared with the preceding year, were in meat, fish, olive oil, and tobacco. Decreases were noted in flour, vegetables, and wine. The exportation of coffee diminished, and that of sugar and honey increased.

The trade of the United States with Puerto Rico during the last seven years, as given by United States Treasury figures, was:

Description.	1891.	1892.	1893.	1894.	1895.	1896.	1897.
Imports:							
Free.........	$1,856,955	$3,236,337	$3,994,673	$3,126,895	$375,864	$48,608	$101,711
Dutiable...	1,307,155	11,670	13,950	8,739	1,131,148	2,248,045	2,079,313
Total	3,164,110	3,248,007	4,008,623	3,135,634	1,506,512	2,296,653	2,181,024
Exports:							
Domestic ..	2,112,334	2,808,631	2,502,788	2,705,646	1,820,203	2,080,400	1,964,850
Foreign ...	42,900	47,372	7,819	14,862	13,341	21,694	24,038
Total	2,155,234	2,856,003	2,510,607	2,720,508	1,833,544	2,102,094	1,988,888

The commerce of Spain with Puerto Rico from 1891 to 1896 was:

Description.	1891.	1892.	1893.	1894.	1895.	1896.
Imports from Puerto Rico..	$3,260,650	$4,428,891	$4,108,654	$4,164,964	$5,824,694	$5,423,760
Exports to Puerto Rico......	3,305,243	3,929,186	4,653,023	5,535,027	8,572,549	7,328,880

The figures from 1891 to 1895 are taken from Spain's Foreign Trade, Frank H. Hitchcock, Department of Agriculture, 1898. The figures for 1896 are from a British Foreign Office report (Annual Series, No. 2065, 1898).

The trade of Puerto Rico with other countries of importance in 1895 (according to the Estadística General del Comercio Exterior) was:

Country.	Imports.	Exports.
Cuba	$808,283	$3,610,936
England	1,765,574	1,144,555
France	251,984	1,376,087
Germany	1,368,595	1,181,396
Italy	19,619	589,045
Holland	325,301	3,246
Denmark	26,565	236,418
British West Indies	1,709,117	521,649
Danish West Indies	600	40,434
French West Indies	55	62,927

The British consul says that the principal exports in 1896 were:

Articles.	Quantity.	Articles.	Quantity.
Sugar.....tons...	54,205	Timber.....tons...	30
Coffee.....do......	26,655	Molasses.....do......	14,740
Hides.....do......	169	Tobacco.....do......	1,039
Cattle.....head...	3,178		

Owing to the troubled state of affairs in Cuba, continues the report, prices for tobacco have increased enormously in Puerto Rico. A large amount has been planted, and the crop promises well.

CITIES AND TOWNS.*

San Juan.—San Juan is situated on a long and narrow island, separated from the main island at one end by a shallow arm of the sea, over which is a bridge connecting it with the mainland, which runs out at this point in a long sand spit, some 9 miles in length, apparently to meet the smaller island; at the other end, the island ends in a rugged bluff or promontory, some hundred feet high and three-fourths of a mile distant from the main island. This promontory is crowned by Morro Castle, the principal fortification of the town. At this end of the island is the entrance to the harbor, with a narrow channel and rocky bottom, so close under the headland that one can almost leap ashore from a passing vessel. The water here is some 30 feet deep. To a mariner unacquainted with the locality, or when a norther is blowing, this entrance is one of difficulty and danger. After rounding the bluff, one finds a broad and beautiful bay, landlocked and with a good depth of water, which is being increased by dredging. It is by far the best harbor in Puerto Rico, and probably as good a one as can be found in the West Indies. However, it has its drawbacks. Sailing vessels are frequently detained by the northerly winds during the winter months, and even steamers with a draft of over 20 feet are sometimes delayed; but these occasions are rare. When they do occur, the "boca," or entrance to the harbor, is a mass of seething, foaming water and presents an imposing spectacle. To see steamers of 16 to 18 feet draft enter in a severe norther, is a sight to be remembered, as the great waves lift them up and seem about to hurl them forward to destruction. At such times there is need of a staunch vessel, steady nerves, and a captain well acquainted with the channel, as no pilot will venture out. The island upon which the city stands is shaped much like an arm and hand; it is about 2¼ miles long and averages less than one-fourth of a mile in width. The greatest width is a little over half a mile in the portion representing the hand, which also contains the major part of the city. San Juan is a perfect specimen of a walled town, with portcullis, moat, gates, and battlements. Built over two hundred and fifty years ago, it is still in good condition and repair. The walls are picturesque and represent a stupendous work and cost in themselves. Inside the walls, the city is laid off in regular squares, six parallel streets running in the direction of the length of the island and seven at right angles. The houses are closely and compactly built of brick, usually of two stories, stuccoed on the outside and painted in a variety of colors. The upper floors are occupied by the more respectable people, while the ground floors, almost without exception, are given up to negroes and the poorer class, who crowd one upon another in the most appalling manner. The population within the walls is estimated at 20,000, and most of it lives on the ground floor. In one small room, with a flimsy partition, a whole family will reside. The ground floor of the whole town reeks with filth, and conditions are most unsanitary. In a tropical country, where disease readily prevails, the consequences of such herding may be easily inferred. There is no running water in the town. The entire population depends upon rain water, caught upon the flat roofs of the buildings and conducted to the cistern, which occupies the greater part of the inner courtyard that is an essential part of Spanish houses the world over, but that here, on account of the crowded conditions, is very small. There is no sewerage, except for surface water and sinks, while vaults are in every house and occupy whatever remaining space there may be in the patios not taken up by the cisterns. The risk of contaminating the water is very great, and in dry seasons the supply is entirely exhausted. Epidemics are frequent, and the town is alive with vermin, fleas, cockroaches, mosquitoes, and dogs. The streets are wider than in the older part of Habana, and will admit two carriages abreast. The sidewalks are narrow, and in places will accommodate but one person. The pavements are of a composition manufactured in England from slag, pleasant and even, and durable when no heavy strain is brought to bear upon them, but easily broken and unfit for heavy traffic. The streets are swept once a day by hand and, strange to say, are kept very clean. From its topographical situation the town should be healthy, but it is not. The soil under the city is clay mixed with lime, so hard as to be almost like rock. It is consequently impervious to water and furnishes a good natural drainage. The trade wind blows strong and fresh, and through the harbor runs a stream of sea water at a speed of not less than 3 miles an hour. With these conditions, no contagious diseases, if properly taken care of, could exist; without them, the place would be a veritable plague spot. Besides the town within the walls, there are small portions just outside, called the Marina and Puerta de Tierra, containing two or three thousand inhabitants each. There are also two suburbs, one, San Turce, approached by the only road leading out of the city, and the other, Cataño, across the bay, reached by ferry. The Marina and the two suburbs are situated on sandy points or spits, and the latter are surrounded by mangrove swamps. The entire population of the city and suburbs, according to the census of 1887, was 27,000. It is now (1896) estimated at 30,000. One-half of the population consists of negroes and mixed races. There is but little manufacturing, and it is of small importance. The Standard Oil Company has a small refinery across the bay, in which crude petroleum, brought from the United States, is refined. Matches are made, some brooms, a little soap, and a cheap class of trunk. There are also ice, gas, and electric-light works. The climate is warm, but for three months of the year agreeable, although one is subject, from the sudden changes, to cold and catarrhs. The natives are particularly susceptible to this class of ailments, and to consumption and bronchitis.

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* Compiled from data furnished the Department by consular officers in 1896.

Ponce.—The city is situated on the south coast of the island of Puerto Rico, on a plain, about 2 miles from the seaboard. It is regularly built—the central part almost exclusively of brick houses and the suburbs of wood. It is the residence of the military commander and the seat of an official chamber of commerce. There is an appellate criminal court, besides other courts; two churches—one Protestant, said to be the only one in the Spanish West Indies—two hospitals besides the military hospitals, a home of refuge for the old and poor, a perfectly equipped fire department, a bank, a theater, three first-class hotels, and gas works. The city has an ice machine, and there are one hundred and fifteen vehicles for public conveyance. The inhabitants, who number about 15,000, are principally occupied in mercantile pursuits; but carpenters, bricklayers, joiners, tailors, shoemakers, and barbers find good employment. The department of Ponce counts about 40,000 inhabitants. The chief occupations of the people are the cultivation of sugar, cocoa, tobacco, and oranges, and the breeding of cattle. Commercially, Ponce is the second city of importance on the island. A fine road leads to the port (Playa), where all the import and export trade is transacted. Playa has about 5,000 inhabitants, and here are situated the custom-house, the office of the captain of the port, and all the consular offices. The port is spacious and will hold vessels of 25 feet draft. The climate, on account of the sea breezes during the day and land breezes at night, is not oppressive, though warm; and, as water for all purposes, including the fire department, is amply supplied by an aqueduct, it may be said that the city of Ponce is perhaps the healthiest place in the whole island.

Mayaguez.—Mayaguez, the third city in importance of the island, is situated in the west part, facing what is generally known as the "Mona Channel." Of industries there is little to be said, except that there are three manufactories of chocolate, which is for local consumption. Sugar, coffee, oranges, pineapples, and cocoanuts are exported largely—all, except coffee, principally to the United States. Of sugar the muscovado goes to the United States and the centrifugal to Spain. Mayaguez is the second port for coffee, the average annual export being 170,000 cwts. The quality is of the best, ranging in price with Java and other first-rate brands. The lower grades are sent to Cuba. About 50,000 bags of flour are imported into this port every year from the United States, out of the 180,000 bags that are consumed in the whole island. The population is nearly 20,000, the majority white. The climate is excellent, the temperature never exceeding 90° F. The city is connected by tram with the neighboring town of Aguadilla, and a railroad is being constructed to Lares, one of the large interior towns.

Aguadilla.—The city, which is the principal town and the port of Aguadilla District, in the northwest portion of the island, has 5,000 inhabitants. Industries in the vicinity consist of the cultivation of sugar cane, coffee, tobacco, and cocoanuts, and the distillation of rum from molasses. In the town are three establishments for preparing coffee for exportation. The climate is hot, but healthy; there is hardly ever yellow fever.

Arecibo.—The town, of from 6,000 to 7,000 inhabitants, is situated on the north coast of Puerto Rico, facing the Atlantic Ocean and some 50 miles distant by rail from San Juan. It is similar to all Spanish towns, with a plaza surrounded by the church and other public buildings in the center, and streets running from it in right angles forming regular squares. The buildings are constructed of wood and brick. The harbor is poor, being nothing more than an open roadstead exposed to the full force of the ocean, in which vessels during northerly winds can hardly lie in safety. Close in shore, on one side, dangerous reefs stretch, a constant menace to vessels if the anchor does not hold. Into this harbor empties a narrow and shallow stream called the Rio Grande de Arecibo. Goods are conveyed on this river to and from the town in flat-bottomed boats, with the aid of long poles and by dint of much pushing and patience. At the bar of the river everything is again transferred into lighters, and thence to vessels. It is a tedious and expensive process. However, Arecibo is quite an important port, and has tributary to it a large district of some 30,000 inhabitants. The want of good roads in the island makes such a place as Arecibo far more important than it would naturally be.

Fajardo.—The town, on the east coast of the island, has a population of 8,779, according to the last official statistics (December, 1887). The port is handsome, with a third-class light-house at the entrance at the point called Cabezas de San Juan, and a custom-house open to universal commerce. The town is about 1¼ miles from the bay. The only important industry of the district is the manufacture of muscovado sugar, to which most of the planters devote themselves. Shooks, hickory hoops, pine boards, and provisions come from the United States in considerable quantities. Sugar and molasses are exported, and occasionally tortoise shell. The climate is temperate and healthy.

Naguabo.—Naguabo (on the east side), is a small town of only about 2,000 inhabitants, and in the harbor there is another smaller place, called Playa de Naguabo, or Ucares, with about 1,500. The capital of the department, Humacao, is 9 miles from Naguabo, and has 4,000 inhabitants—the district comprising more than 15,000.

Arroyo.—Arroyo, in the district of Guayama (southeast portion), is a small seaport of about 1,200 inhabitants. The annual exports to the United States average 7,000 to 10,000 hogsheads of sugar, 2,000 to 5,000 casks of molasses, and 50 to 150 casks and barrels of bay rum.

VIEQUE.

The island of Vieque, situated 13 miles east of Puerto Rico, is 21 miles long and 6 miles wide. Its land is very fertile and adapted to the cultivation of almost all the fruits and vegetables that grow in the West Indies. Cattle are raised and sugar cultivated. It has a population of some 6,000. The town, Isabel Segunda, is on the north, and the port is unsafe in times of northerly wind, like all the anchorages on that side; the few ports on the south are better, the best being Punta Arenas. Not long ago there were two importing and exporting houses on the island of Vieque; but, on account of the long period of drought and the high duties on foreign-imported goods, trade has decreased to local consumption only. All supplies are brought from San Juan, the majority being of American origin. The climate is fine and may be considered healthy; there have never been any contagious diseases.

SHIPPING.

Shipping of Puerto Rico in 1895.[*]

Country.	Entrances.		Clearances.	
	Vessels.	Tonnage.	Vessels.	Tonnage.
Spain	150	296,424	121	126,662
England	109	135,349	3	1,580
Germany	50	79,495	25	32,740
France	44	55,908	48	65,926
Belgium	16	12,751	...	...
Italy	3	4,537	8	8,139
Cuba	171	180,772	262	358,427
United States	190	182,165	284	201,051
Denmark	...	...	11	4,686
Austria	...	...	5	8,513
Dominican Republic	59	20,103	60	21,594
Colombia	2	1,341	...	...
Venezuela	25	36,089	1	68
Haiti	2	2,454	...	...
Argentine Republic	1	286	...	...
Uruguay	9	4,893	...	...
Brazil	4	2,789	...	...
Danish West Indies	45	11,140	47	24,528
British West Indies	160	49,997	151	44,285
French West Indies	30	2,264	34	1,597
Dutch West Indies	7	279	9	505
Mexico	...	...	1	78
Total	1,077	1,079,236	1,070	900,379

[*] From the Estadística General del Comercio Exterior.

AGRICULTURAL CREDIT ASSOCIATIONS IN CANADA.

The sentiment, alluded to in my report of March 26,[*] in favor of furnishing provincial farmers with cheap money, to be used in developing agricultural lands, has been recognized by the provincial government after being indorsed by several farmers' institutes. Last week the premier introduced into the legislative assembly an important measure, believed to be the only legislation of the kind yet attempted on the American continent. Although new to this hemisphere, the system of agricultural credit banks or associations has been developed with considerable success in Germany, Italy, France, and other European countries, and has lately been started in Great Britain and Ireland; also in the presidency of Madras, India. It is proposed by this measure that the government deal with associations only, and not with individuals. Briefly outlined, the measure proposes as follows:

Any number of farmers or traders of a community of twenty-five or more members may form themselves into an association, paying an entrance of $5 each and subscribing to a certain number of shares, the number of shares to be proportionate to the amount which a member may reasonably be supposed to become good for in case he is called upon. The membership fees are, as paid in, deposited with the government to the credit of the member and draw interest, accumulating to the credit of the member. The fund so formed is not called into requisition, except in case of the failure or part failure of the association to pay its liabilities. In case of a member withdrawing, he is entitled to a refund with a premium. No amount of the shares is necessary to be paid up; they simply stand as a guaranty to the government, much in the sense of a promissory note, that the member will pay the amount of the shares subscribed in case of an emergency. Every share carries with it a double liability, so that the government is thoroughly well protected against risk of loss. The association borrows money on the aggregate value of its shares, by issuing debentures at, say, 3 or 3½ per cent, which may be guaranteed by the government. The association loans the money to its members, taking into consideration for security personal worth, industry, and assets, real and personal. Under this system the reproductive earnings of a man, together with his general character and standing in the community as to honesty, industry, and intelligence, will constitute part of his general credit, much as it does in ordinary banking circles.

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[*] See Advance Sheets No. 95, April 23, 1898.

The modus operandi of the associations is shown fully in the model rules and regulations submitted with the bill. There is a managing committee, to whom all applications for loans must be made, and each application is considered upon its own merits. For instance, if a man wants money to buy stock with or agricultural machinery, or to underdrain his land, or clear or carry on any of the ordinary operations of his farm, he may apply to the managing directors, who meet once or twice a month to consider such applications. The managing committee must satisfy themselves of three things: (1) That the member is personally and in character and surety offered good security for the amount loaned; (2) that he absolutely requires the loan, and that the expenditure will be beneficial and reproductive; (3) that the money loaned will be applied in the most useful and economical manner. The objects for which loans may be obtained may be indicated as follows: (*a*) Drainage, which is the substructure of farming; (*b*) clearing of land; (*c*) purchase of stock and implements; (*d*) fences and buildings; (*e*) cooperative dairying, etc.; (*f*) any other reproductive work or expenditure approved by the association. The safety of the system consists in this fact, that the managing committee, being personally responsible to all other members, will exercise the greatest care in regard to the loans made, and, being acquainted with those to whom money is loaned, can exercise a greater care than would otherwise be possible. In addition to the committee of management, there is a committee of audit, consisting of six members, who may investigate the affairs of the association and examine the books at any time. In addition to this, again, the affairs of the association are subject to the scrutiny of the government auditor, who may at any time intervene and prevent an improper working of the system.

This important measure, which does not pay off mortgages on farms, is designed to help new settlers with small effects to secure money at low rate of interest for permanent improvements. According to the provincial secretary, the sponsor, the government by this measure practically says to the farmer:

We can not lend you money on mortages, or deal with you individually, because it is contrary to the first principles of government and liable to gross abuse; but, if you show your confidence in each other and are willing to lend your credit to each other and become liable for each other by pooling security, we are willing to deal with you as a community and lend you money on communal credit.

I beg to inclose herewith copy of the full text of this measure, which it is expected will be enacted into law in the near future.

ABRAHAM E. SMITH,
Consul.

VICTORIA, *April 30, 1898.*

MUTUAL CREDIT BILL—DETAILS OF THE SCHEME FOR HELPING THE FARMERS TO ASSIST EACH OTHER—OBJECTS FOR WHICH THE ASSOCIATION MAY LOAN MONEY.

The following are the principal provisions of the bill introduced by the premier for the establishment of mutual credit associations for the encouragement of trades and agriculture:

The lieutenant-governor in council may appoint an auditor of associations under this act.

It shall be the duty of the auditor to enforce compliance with the several provisions, regulations, and stipulations in this act contained, or in any regulations made thereunder.

The lieutenant-governer in council may make and establish rules and orders for controlling the business and affairs of associations, and for prescribing the course to be adopted in the conduct of business under this act, and the forms to be used and fees to be paid therein.

No association shall be formed under this act for the purpose of carrying on, and no association formed under this act shall carry on, any business, trade, or calling that has for its object the acquisition of gain otherwise than by means of the employment of money in the manner by this act provided.

Any twenty or more persons associated for the purpose of procuring the incorporation of an association under this act may, by subscribing their names to a petition for incorporation and otherwise complying with the provisions of this act in that behalf, obtain a charter of incorporation.

The objects for which an association may be incorporated under this act shall be to procure moneys by monthly or other contributions and deposits from the members thereof, and by means of loans upon debentures issued and guaranteed, at such rates of interest as the association may determine, to the members of the association only, and for the purpose of the aid and advancement of any such member in his trade or calling, and for no other purpose whatsoever.

Every association shall require the officers, secretaries, treasurers, and trustees thereof, if any, to give security.

Membership and shares.—The number of members and the number of shares in an association shall be unlimited; every member shall be a shareholder and no member shall hold, either in his own name or in the name of any other person in trust for him or otherwise howsoever, more than ——— shares in the association.

The shares of the association shall not exceed in face value the sum of $10 each.

The act shall for all purposes extend to minors and females; and copartners, bodies corporate, and incorporated societies and associations may become members of, and shareholders in, any association incorporated under this act.

The rules of the association shall provide the terms and conditions of the admission of members and the allotment of shares and the procedure to be followed in that behalf; provided that there shall be deemed to be in every application for membership and shares in the association a covenant on the part of the applicant, his heirs, executors, and administrators, to conform to all the conditions, rules, and regulations of the association, subject to the provisions of this act.

Subject to the provisions of this act limiting the holding of shares, the shares in the association shall be assignable, subject to the rules of the association.

The rules of the association shall provide the amount of premium by way of membership fee or otherwise (not being less than $5 in respect of each issue of a share or shares), to be charged upon the issue of shares, and the amount of calls to be levied pro rata upon the shares of the association for the cost of management thereof:

(1) The association shall from time to time deposit in the treasury to the credit of the association in an account to be opened and kept by the minister of finance and agriculture, and known as the agricultural credits associations' guaranty fund, and on such terms as to interest and otherwise as the lieutenant-governor in council may appoint, all premiums collected under this section by the association.

(2) In the event of a loss occurring to the government by reason of any liability of the association being paid by the government pursuant to any guaranty given under this act, the lieutenent-governor in council may by order in council, in addition to all other rights and remedies in that behalf by this act provided, direct to the satisfaction or part satisfaction of such loss, firstly, out of the moneys standing to the credit of the association with the said account, and, secondly, in the event of such moneys proving insufficient to satisfy the whole of such loss, then to the extent of such insufficiency out of all the moneys standing to the credit of the said account, and so far as may be, proportionably and ratably out of the amount standing to the credit of each association having a credit with the said account.

No loans shall be made by the association except to its members.

The rules of the association shall provide the manner in which loans of the funds of the association shall be made to members thereof; provided that no loan shall be made to any member of an amount exceeding either the amount of the nominal value of the shares held by such member or the sum of $1,000, whichever limit may be fixed by rules for the time being in force under this act, or in default thereof by the rules of the association:

(1) The above restriction on the amount of loan shall not apply to loans to incorporated societies or associations, which may be of such amounts, at such interest, on such terms as the securities, and for such times as the lieutenant-governor in council may approve.

The rules of the association may, subject to the provisions of this act and of any rules for the time being in force thereunder, provide the terms upon which, and the manner in which, the association will receive from the members thereof deposits of money, either for the purpose of creating a fund to be used for the payment of a loan already obtained by such members from the association or as a fund in respect of which a loan may thereafter be applied for by such member. Moneys so placed on deposit may be used and invested with the other funds of the association and for the purposes thereof. The rules of the association may also, subject as aforesaid, provide the terms upon which, and the manner in which, deposits may be withdrawn, and the interest or premium, if any, which the association will pay thereon; provided that in the event of the association becoming at any time unable to pay its debts in full upon demand, the repayment of depositors shall be suspended, and, in the event of the winding up of the association, shall be postponed until payment of all other debts of the association in full. After payment of such debts in full, the depositors shall be entitled to rank and prove pro rata and without preference or priority upon the assets of the association.

Any association may, in respect of loans made to its members, receive and take real or personal security of any nature or kind whatever as security for any such advance or loan.

The rules of the association shall provide for the transmission of shares in the association by reason and in consequence of the death, bankruptcy, or insolvency of any member of the association.

Lending power.—In addition to any other objects in respect of which, either under the provisions of this act or any rules for the time being in force hereunder, loans may lawfully be made by the association to its members, it shall be lawful for the association to make loans to its members in respect of the classes of objects following, that is to say:

(1) For aiding a member to drain, clear, or cultivate lands owned or leased by him, provided that no loans be made in respect of leasehold lands held for a term of less than two years from the time of such loan;

(2) To enable a member to purchase live stock, stock in trade, implements, fixtures, and trade of farming effects;

(3) To enable a member to construct or improve fences and buildings;

(4) To assist cooperative dairying or farming, and to assist in the conduct of the purposes of any incorporated association or society, subject to the approval of the lieutenant-governor in council; and

(5) To enable a member to carry out or incur any reproductive work or expenditure reasonably expedient in the conduct of his trade or calling, and not prohibited by this act or by any rules for the time being in force hereunder.

Debentures.—No association incorporated under this act shall borrow, receive, take, or retain (otherwise than by deposits made by the association by members thereof) any greater sum that the aggregate amount of shares actually subscribed for by and alloted to members of the association in good standing.

The managing committee may issue debentures of the association bearing interest at a rate not exceeding 6 per cent per annum to the extent of the borrowing powers of the association, and may dispose of such debentures to the highest bidders; provided that no such debentures shall be issued until approved by the lieutenant-governor in council as hereinafter mentioned.

The managing committee of the association proposing to issue debentures under this act shall transmit to the clerk of the executive council a copy of the resolution of the managing committee respecting such issue, setting forth the details and particulars thereof and a copy of the proposed debenture. The lieutenant-governor in council may either prohibit or approve of such intended issue, and such approval may be given subject to such terms and conditions as the lieutenant-governor in council may impose. A notice shall be published in two numbers of the British Columbia Gazette of the fact of such issue being made by approval of the lieutenant-governor in council. The notice shall state that the debentures when issued will be sold to the highest bidder for cash, and shall invite tenders therefor.

The lieutenant-governor in council may, in lieu of approving several issues of debentures on behalf of one or more associations, by order in council, provide for a consolidation of such issues and the payment to each association interested of its proper share of the proceeds of such consolidated issue, upon such terms and conditions and in such manner as he may think fit.

All the property, real and personal, of every member of the association, to the amount of the nominal value of its shares therein, and all the property, both real and personal, of the association, shall be liable for the payment of the general liabilities of the association and for the payment of the debentures thereof, either to the holders of such debentures or to the government of the Province, for any debentures which may be paid or taken up by the government under guaranty given by the lieutenant-governor in council under this act, and in such latter case the lieutenant-governor in council may levy upon all the real property of such members an annual rate and tax pro rata, according to the assessed value thereof, sufficient to provide for the payment of the said debentures, both principal and interest, and also for the payment of accruing interest until paid, and may levy and enforce the payment of such rate and tax under and pursuant to the provisions of the assessment act.

Reserve fund.—No dividend shall be paid upon the shares of any association under this act; but all the profits and earnings of the association shall, after payment thereout of all the just debts and liabilities of the association, and of all the costs and expenses of the management thereof, and of the current payments on account of the sinking fund (if any) required by any rule or order in council to be established upon any issue of debentures, be carried to an account to be known as the "reserve fund," which shall be accumulated for the benefit of the association and used and invested with the other funds of the association and for the purposes thereof.

In event of the winding up of the association, the reserve fund shall, after payment and satisfaction of all the liabilities of the association, be distributed among the members thereof in proportion to the amount of their shares respectively.

Winding up.—The rules of the association shall provide the terms and conditions upon which the association may be voluntarily wound up by the members thereof, and the procedure to be adopted in such voluntary winding up.

If at any time it shall appear to the auditor of associations under this act that any association is insolvent or unable to meet its obligations in full, and that it is necessary that the association be wound up, he shall apply to the supreme court or a judge thereof in a summary manner by petition for an order for the winding up of the association, and the court or judge shall, if satisfied that the facts are such as to justify the winding up of the association, and that the members refuse or neglect to subscribe a sufficient sum of money to render the association solvent, make an order for the winding up of the association, and shall in and by such order fix a sum of money necessary to be subscribed and paid, in order to enable the association to continue in existence, and the time within which such sum of money must be paid, and shall also fix the terms upon which, and the manner in which, the association shall be wound up in default of such sum being subscribed and paid. If such sum be paid within the time fixed by the order, or within such extended time as the court or judge may allow, the petition shall be withdrawn upon payment by the association of the costs thereof; otherwise the association shall be wound up and its assets and reserve fund applied and distributed pursuant to the terms of such order and to the provisions of this act.

The members of the association so wound up shall, pro rata to the extent of the shares respectively held by them in the association, be liable as contributories in respect of any balance of liabilities remaining due to any creditors of the association after the distribution and application of the assets and reserve fund of the association, in the manner provided by the preceding section.

The following are extracts from the summary of regulations for agricultural credit associations submitted with the bill:

(1) The object of this society is to create funds by monthly or other contributions, or by the issue of debentures, to be lent out to, or invested for, the members of the society, or for their benefit pursuant to the act; provided that every loan shall, in the opinion of the society, hold out a sufficient prospect of repaying itself by the production, business, or economy which it will enable the borrower to effect. The contribution to be payable by a member to the funds of the society shall be a contribution equally with every other member to any loan which a member borrowing or his sureties fail to repay. The society shall not engage in any banking

operation other than as implied in the foregoing statement of its objects, nor trade or speculate with the money in its hands, but shall confine itself strictly to the collection and lending of funds.

(2) *Statutory requirements as to rules.*—The rules of the society must in every case make provision for: (*a*) The admission of members and the allotment of shares; (*b*) the premium or membership fee not being less than $5 in respect of each issue of a share or shares, and the collection from the members of the cost of management of the society; (*c*) the making and the taking of security for loans; (*d*) the transmission of shares by reason of death, bankruptcy, or insolvency; (*e*) the terms and conditions on which a voluntary winding up may take place and the procedure to be adopted.

(3) *Membership.*—Compliance with any one of the following qualifications shall constitute membership: (*a*) Election by the committee upon his own application of any resident in the district for which the society is formed whose liability is not already pledged by membership in a similar association; (*b*) acceptance as member of any person who shall make himself responsible to the society by the guaranty of a certain sum in its favor. No member shall be capable of holding an interest in the funds exceeding $1,500.

(4) *Rights and liabilities of members.*—Every person becoming a member of the society shall be entitled to obtain loans from the society for specified and approved purposes within the limit prescribed for such periods and at such interest as the society may determine. All moneys payable by a member to the society are deemed to be a debt due from such member, and are recoverable as such in the county court of the district in which such member resides.

(5) *The general meeting.*—The supreme authority in the society is vested in the general meeting of members of the society, at which every member has a right to attend and vote on all questions, every member having one vote, whatever be his interest in the society. The vote is to be exercised in person only, not by proxy. The general meeting shall have power to decide any disputes arising within the society and any questions affecting the interests of the society, and to hear and adjudicate upon any appeals carried before it against decisions of any of the governing bodies. Its judgment shall in every case be final. It shall elect the committee of management and the council of control and audit for the year and one or more trustees, a treasurer, and any other officer required to be appointed under the act or under the rules. It shall be for the general meeting to fix the rates of interest alike for deposits paid in and for loans granted, to limit the power of the committee, if that be deemed advisable, in respect of granting loans or receiving deposits, and also in respect of the length of time for which loans may be granted by the committee upon its own responsibility.

(6) *The committee.*—The current business of the society shall be intrusted to a committee of management consisting of five members, elected every year by the members at the annual general meeting and reeligible on the expiry of their term of office. The committee shall have power to act on behalf of the society within the limits laid down in these rules, but shall be responsible for its act to the general meeting of members. The members of the committee shall draw no salary or other remuneration. The committee shall meet as often as the business of the society may require, and in any case at least once a month, three constituting a quorum, to receive the deposits paid in, and deal with all applications for membership and loans to hand at the time. At the close of every such sitting, the committee shall draw up a statement of accounts, showing the amount of loans outstanding, of deposits on hand, of the reserve fund, of fines paid, and all assets and liabilities of the society, together with the number of members. It shall be the duty of the committee, at the close of its term of office, to prepare a balance sheet and full

statement of accounts. The books and accounts of the society shall be open to the inspection of any member or person having an interest in the funds of the society at all reasonable times.

(7) *The council.*—In addition to the committee, there may be a council of control consisting of at least six members, who shall not be members of the committee, likewise elected semiannually by the members at the general meeting. Its members shall receive no salary or remuneration. The council shall have free access to all accounts, documents, minutes, and other records of business done on behalf of the society. It shall meet at least once every three months to audit the accounts, review the business transacted by the committee, satisfy itself that all rules have been complied with, and discharge duties to be named hereafter. The council shall annually report to the general meeting, and may, in cases which appear to it to demand urgency, call an extraordinary general meeting to lay any matter before it.

(8) *Officers of the society.*—The committee may appoint a secretary and also a treasurer, who shall both be liable to dismissal by the same authority. The same person may discharge both offices, and as treasurer may, with the approval of the general meeting, draw a salary. But the treasurer shall not in any case be a member either of the committee or of the council, or have a vote affecting the disposal of money. At the discretion of the committee, the treasurer shall be required to find security or sureties.

(9) *Election, retirement, and expulsion of members.*—Application for membership shall be made to the committee. In the event of the committee refusing election, an appeal shall lie to the next general meeting. A member may withdraw, upon three months' notice, provided that he has satisfied all claims in respect either of money or of suretyship which the society may have against him; but such withdrawal shall not take effect in respect of the member's liability to make contributions under rule 1, until twelve months thereafter. A member having, in the opinion of the society, committed any action calculated to injure the society, may, upon proper notice given to every member, be expelled by resolution of a general meeting of members summoned a fortnight before the day of meeting. A member leaving the district shall cease to be a member of the society upon discharging all claims which the society have against him. Members expelled from the society, or retiring by leaving the district, or by notice, shall lose their right of voting as soon as the expulsion or retirement takes effect, but shall remain liable for any claims which the society may have against them.

(10) *Loans.*—Any member desiring a loan shall make his request in writing to the committee, stating the object for which the loan is required, the term for which it is asked, and also the security which he is prepared to offer. The committee shall consider the application at its next meeting, but shall be entitled to reserve its decision for inquiries. If satisfied of the trustworthiness of the applicant, of the sufficiency of the security offered—whether by surety only or by some additional pledge or guaranty—and of the profitableness, by productiveness or saving, of the employment, it shall be empowered to grant the loan, against note of hand or otherwise, and for any length of time which may appear to be requisite for the purpose, within the limits permitted by the general meeting; provided always that loans granted for periods longer than a year shall be repayable by regular installments of equal amount. In the event of a loan being applied for of a larger figure or for a longer term than the general meeting has given the committee authority to agree to on its own responsibility, the committee shall have power to refer the case to the council (or the general meeting) and with its sanction to grant the loan. The committee shall have power to secure the society in respect of loans granted in any manner which it may deem desirable under the circumstances, such as a stipulation that a beast or animal purchased with the money borrowed shall be

insured in such society as it may approve, and that the borrower shall be bound on every demand to satisfy the society or its officers that the money borrowed has been employed in the way agreed upon, by producing the beast or article purchased, or supplying any other proof which the society may hold to be sufficient. It shall be the duty of the council to ascertain from time to time if the rules here laid down have been complied with, to inquire into the position of borrowers and their sureties, alike as regards solvency and trustworthiness, and to satisfy itself if the assets of the society continue good. Should it find that the security has deteriorated in respect of any claim against a member, it shall be its duty at once to call for additional security, and, if that be not forthcoming, to report the case to the general meeting or else to call in the loan without delay and secure the society in such a way as it may find practicable. More particularly shall it be the duty of the council to satisfy itself, by means of the powers referred to above, that loans granted to members are employed in the manner agreed upon, and, should it find that this is not the case, it is at once to demand repayment of the entire loan, with all interest due, within four weeks, making the sureties answerable, if necessary, or satisfying itself from the security in its possession. Borrowers shall in any case be required to pay interest punctually at the periods fixed, and shall be punishable for any default in respect either of interest or of principal with a fine, to be fixed by the general meeting; and upon such default may, at the discretion of the committee (subject to an appeal to the council), be required forthwith to repay the loan. In cases of repeated defaults the council shall have power to move the expulsion of the defaulting member under rule 9.

(11) *Reserve fund.*—The entire surplus accruing after defrayal of expenses shall be carried to reserve, which reserve shall not in any case become divisible among members. The reserve fund shall, however, be available, if the general meeting so decide by special resolution, due notice being given to every member at least a clear fortnight before, for making good deficits which may occur.

(12) *Deposits.*—The society shall have power to receive deposits from members not exceeding two-thirds of the total sum for the time being due the society from members who have borrowed, and pay interest upon them at such rates as the general meeting shall authorize. It shall not, however, be held pledged to absolute secrecy under penalty of a fine to be fixed by the general meeting, not exceeding ——.

(13) *Property of the society.*—All the properties, both real and personal, acquired on behalf of the society are vested in the society, and the society may contract and sue as a corporation.

(14) *Audit of accounts.*—The committee of management shall once at least in every year submit the accounts, together with a general statement of the same and all necessary vouchers up to the 31st of December then last, for audit, to the public auditor appointed under the act, and to two or more persons appointed as auditors by the members at a meeting.

(15) *Dissolution of the society.*—The society may at any time be dissolved by voluntary proceedings where the members of a solvent society desire to wind up business, or by order of court in the case of an insolvent society.

PROJECTED RAILWAYS IN MANITOBA.

I have the honor to report that, judging by present indications, there will be great activity in railroad building in Manitoba this season, and that this will be a fruitful field for contractors and dealers in railroad materials. During the recent session of the

Manitoba legislative assembly, several important measures were enacted, designed to aid and encourage railroad building, and as a result some 500 miles of road will be constructed in the near future, about one-half during the present year. One line to which aid was extended is the Manitoba and Southeastern, running from the city of Winnipeg to the Lake of the Woods, or to the mouth of the Rainy River. This line is located to a point 80 miles southeast of Winnipeg, and will be completed that far this summer. From that point it will either cross the Lake of the Woods at the Narrows, or pass around the south end of the lake to the mouth of Rainy River, as may be shown to be the most feasible by surveys. If the latter course is adopted, the road will run 35 or 40 miles through the State of Minnesota. This road is designed to be part of a line connecting Winnipeg with the waters of Lake Superior, and when completed to Rainy River will, in connection with roads now in operation, lack but about 60 miles of making another all-rail route to the lake.

Another line of road to be built runs from the town of Sifton, on the line of the Lake Manitoba Railway and Canal Company's road, generally known as the Lake Dauphin Road, north to the Saskatchewan River, a distance of about 250 miles. This is another link added to the long-contemplated "Hudson Bay Road," which will undoubtedly be completed to the bay in the near future.

Both these lines of road run through good agricultural lands for the greater part of their course, but they will also open up large bodies of timber and mineral lands of immense value. On both of these lines the Province of Manitoba guarantees the payment of principal and interest of their first mortgage bonds to the amount of $8,000 per mile and exempts the railroad properties from taxation for the term of thirty years. This aid is given in addition to liberal land grants and subsidies heretofore voted to these roads by the Dominion Government.

The provincial legislature also voted a subsidy of $1,750 per mile and a lump sum of $20,000 to the Northern Pacific Railway Company for an extension of their Brandon branch from the town of Belmont to Hartney, on the Canadian Pacific Railway, a distance of about 50 miles. This last-mentioned line is in the southwestern part of this Province (Manitoba) and runs through as fine a belt of wheat land as can be found on the continent. These several lines, converging as they do at the city of Winnipeg, will be of great value to the city and will materially assist in promoting its prosperity, as well as that of the Province of Manitoba.

WM. H. H. GRAHAM,
Consul.

WINNIPEG, *April 30, 1898.*

RAILWAYS IN SOUTH AFRICA.

Consul-General Stowe transmits from Cape Town, under date of April 18, 1898, the following letter in response to a request for information from a railway journal of New York:*

The steam railways in South Africa are as follows:

The Cape Government Railways. General manager, C. B. Elliott, Cape Town.

The Orange Free State Railways. Director-general, E. R. Brounger, Bloemfontein.

The Netherlands South African Railway Company. Managing director, G. A. A. Middelberg, Pretoria.

The Natal Government Railways. General manager, D. Hunter, Durban, Natal.

The Bechuanaland Railway Company, Limited. Secretary, J. A. Stevens, Cape Town.

The Indwe Railway Company. Managing director, Colonel Schermbrucker, Cape Town.

The New Cape Central Railway Company. Agent, Sir Thomas Scanlen, Cape Town.

The Pretoria-Pietersburg Railway (in construction). General manager, G. Mayo, Pretoria.

The Grand Junction Railways, Limited (in construction). Secretary, S. Tonkin, Cape Town.

Kowie Railway Syndicate. Manager, H. Putt, Grahamstown.

Portuguese Railways, Mozambique. Engineer director, C. Albers, Lorenzo Marquez, East Africa.

Particulars of the Cape Government Railways I have pleasure in appending, but for details as to the other railways mentioned I must refer to the principal officers named in each.

The principal officers of the Cape Government Railways, besides the general manager, are: Engineer-in-chief, John Brown, Cape Town; chief locomotive superintendent, H. M. Beatty, Salt River; chief traffic manager, T. R. Price, Cape Town; financial secretary, James Easton, Cape Town; accounting officer, A. J. Robb, Cape Town; chief railway storekeeper, W. Sinclair, Cape Town; agent general in London, Sir David Tennant, Westminster; commercial agent in New York, M. Berliner, Whitehall street.

The Cape Government Railways are divided into the following four systems:

Western system, 592 miles open, from Cape Town to De Aar, including the Malmesbury, Sir Lowrys Pass, Wynberg, and Simonstown branches.

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* Advance Sheets of report have been sent to the journal.

Midland system, 704 miles, from Port Elizabeth to De Aar, including the Grahamstown and Colesberg branches.

Eastern system, 331 miles, from East London to Bethulie Bridge, including the King Williams Town and Aliwal North branches.

Northern system, 273 miles, from De Aar to Vryburg; principal station, Kimberley; no branches.

There are at present no lines under construction by the Government or by contractors on behalf of the Government. Several routes are, or have been lately, under survey; but I am not at present in a position to say anything as to the prospects of building.

COMMERCIAL CONDITIONS IN CAPE COLONY.

DOCK FACILITIES.

There appears to be a feeling among some, at least, of the export commission houses in the United States, that unnecessary delay in unloading vessels sailing from the United States is caused by partiality on the part of the dock authorities.

I have been unable to discover, after much inquiry among merchants who buy American goods, that delay in unloading is caused by any favoritism; it is rather due to inadequate dock facilities. I am pleased to report that these have been materially improved. New and commodious docks are being built, with large warehouses thereon. Several traction engines have been purchased, each capable of hauling heavily loaded drays or wagons. I therefore believe that the complaints mentioned will soon be of the past.

All coal used in this colony and on several lines of steamers that touch here is brought from Cardiff, South Wales. Coal of good quality has been found here, and 200 tons per day is now being delivered in Cape Town. If, on full trial, this coal proves to have the necessary steaming qualities, the present dock, with the extensions now in course of erection, will be more than ample. Vessels that are now obliged to go out in ballast can then load with coal if they wish to enter other ports, which will be a source of revenue not only to the colony, but to the owners of vessels as well; and freight rates, which are now based on outward cargo alone, can then be reduced on part at least of the homeward cargo.

Again, the difference in the price of coal will be of advantage to owners of vessels homeward bound. Seven dollars and twenty-five cents per ton is the present price of Cardiff coal, against $4.12 per ton for Cape Colony coal, which will lessen as the output increases.

The harbor board that has full charge of the docks is a corporation which borrowed the necessary capital from the Government for the erection of said docks, and which has complete control for all time. That it will work for the interests of all concerned, as soon as the extensive improvements under construction are completed, is not doubted.

FREIGHT RATES.

I think that shippers from the United States to this country have no reason to complain of the freight rates, as compared with those from other countries, although some of the vessels that transport American goods to the ports of South Africa are owned in those very countries.

The New York rate is now about $2 per ton of 40 cubic feet less than from Hull, England. At one time the difference was greater in favor of the United States, but complaints by other countries brought about a reduction in their favor. With better docking facilities and cheaper coal for homeward voyages, freights must be, in time, materially reduced.

Recently a new German line of steamers, known as the German-Australian Steamship Company (the Deutsch Australische Dampfschiffs Gesellschaft), has entered the field and will cause keen competition, as a reduction of 25s. ($5.85) per ton is offered to Port Elizabeth, on the African coast. The service will be every four weeks from Hamburg and Antwerp; but goods are also taken from other ports in Europe and for other ports in South Africa. From June, 1898, the service will be doubled and made fortnightly. The company is an old established one, and is not dependent upon this trade alone; being thus free from the consideration of return cargo from South Africa, which plays such a part in the high rates of existing lines.

LANDING CERTIFICATES.

Complaints have been made that both the captain and mate of ships arriving at South American ports are "compelled to visit the consular office," in order to take oath that the goods or merchandise enumerated in the certificate were actually delivered, and this visit is demanded by the consul in order that he may obtain the fee. It should be stated that the fee does not belong to the consul, but to the Government, and the certificate of the revenue officer or consignee is sufficient when the affidavit of the master is not procurable.

EXPORT COMMISSION HOUSES.

Some of the most important merchants in this country are desirous of purchasing direct from the manufacturers of the United States, without the intervention of what is known as "export commission houses," or middlemen, and while this is a subject I approach with some hesitation, yet I offer my views, with the desire to benefit our manufacturers and producers. That in time this direct purchasing will be advantageous I admit, but at present the legitimate export commission houses are the opposite of detrimental to the extension of our foreign trade. I refer to the class of houses that act as agents, buying such goods only as their clients may order, contracting the freight and insurance, and paying the manufacturer cash on receipt of the goods. Being large buyers, they are enabled to purchase at low prices, and being large shippers, they are enabled to contract lower rates of freight. They are able to sell more goods at less expense than would the manufacturers. Representing as they do varied lines, they are sure to sell some line meeting the need of the customer, and it is for their interest, as they work on commission, to use every energy to sell all the goods.

There is some complaint against so-called "export jobbers," who buy of the manufacturers at the lowest possible cost and sell to the foreign buyers at the highest price they can secure; and who often resort to substitution of goods of lower quality or bought of a different manufacturer than the one the foreign buyer may have specified, thus damaging the interests of both foreign buyer and manufacturer.

There are also, it is alleged, those who publish so-called "prices current," on which are advertised goods of various manufacturers. They often quote prices that they can not meet when order is received.

The legitimate export commission houses pay all expenses, and take fair compensation for service and credit granted; in short, they act as the banker for a foreign buyer and are the bridge between the American maker and the foreign buyer. The manufacturer is saved the expense of introduction and all risk.

ADVANTAGE OF AN AMERICAN BANK.

The following is an illustration of the conditions when an exporting house ships goods and draws drafts to cover value:

If the draft is drawn on New York through British bankers or their agents, the charges for, say, a ninety days' draft are:

	Per cent.
Charge for collection	1
Charge for four months' interest at 6 per cent	2
Charge for two months' interest	1
Total	4

The second charge is to cover time of transit of draft and the ninety days from acceptance to payment. The banker here in South Africa remits to the New York banker a ninety days' draft on London, so that by the time this gets to New York it has two months yet to run, and for this the last charge of 1 per cent for interest is made.

This is not the only loss. When the original draft is made, sterling is worth, say, $4.85 to the pound, but during the five months covered by the draft before it gets back to New York exchange may go down, so that the shipper may get $4.78, or perhaps only $4.75; so that the additional loss is the difference of, say, 9 cents on every pound sterling.

American manufacturers are dependent on competitors in foreign countries to ship their goods and collect their drafts. An American bank (international) would help to increase the export trade. Two months' interest might be saved, as well as all exchange, for then draft could be made for dollars and dollars received. In addition, American manufacturers, producers, and exporters would be able to receive reliable information as to the financial standing of foreign merchants, which can not be done through British banks or their agencies.

HOW TO SELL GOODS IN SOUTH AFRICA.

The development of South Africa will be speedy as soon as certain questions are settled and irrigation introduced, and it is for this time that our manufacturers should prepare. Men of experience should be sent to canvass and ascertain the needs of the market, the competitors, the prices paid, etc.

Our manufacturers object to carrying out the wishes of foreign customers when such views conflict with their own; they dislike to change methods, and consequently do not cater to foreign wants as do the manufacturers of other countries, particularly England and Germany. If the foreign trade desires nails packed in kegs of 112 pounds, instead of the American keg of 100 pounds; if it desires certain cheap cloths dyed in the yarn, instead of the piece; if it wants vehicles with seats 6 inches wider, and with no wider "track;" if it desires the boxes in which goods are shipped dovetailed at the corners, or strapped with iron; if it wants goods sent in bags of a certain quality, when barrels have previously been used; if it desires a change of style of package—all these wishes should be complied with.

The Germans particularly are willing to do anything to get the business, and with their ships reducing freight rates (as detailed in another part of this report), they naturally obtain their share of the trade. They also gladly sell on ninety days' time. At present, business is dull, the drought, rinderpest, and fly, and the state of affairs in the South African Republic, causing hindrance to trade; but these conditions can not last.

When orders are given, they must be large, for the reason that good stocks must be carried, as communication with foreign countries is slow. The stores (and I have visited all of them) carry stocks of which many of our jobbers in the United States would be proud. It must be borne in mind that Cape Colony demands £25 ($121.50) per year for license to sell, and the South African Republic £20 ($97.20). A duty on samples is also asked.

OPENINGS FOR TRADE.

To the question "What business might be profitably introduced in South Africa?" I would say that an American like myself misses many conveniences, and even what we call in America necessities; but residents here look upon them as luxuries, and very easily get along without them. That there are opportunities, I admit, but it would be unwise, to say the least, to venture to advise or to state positively that any business would be profitable. There are a number of Americans in trade in this country, and, while many have made money, others have lost. This answer may not appear very satisfactory, but a consul would be condemned if he raised hopes that might not be fulfilled.

EXPOSITION OF UNITED STATES PRODUCTS.

Such an exposition would be of advantage if it were open to all, and not to houses handling only certain lines. To be successful, it should be general and should be properly advertised, so that all who desire to exhibit could do so, with expenses shared "pro rata."

It would not be necessary for each manufacturer or export house to have a representative present; the exhibits could be placed in charge of a few, who would be employed by all.

Arrangements should be made, if possible, for the free introduction through the custom-house of Cape Colony of all samples for exhibition; and, in the event any samples were sold, duty could be paid on the same. Samples of not only machinery, but tinned goods, pease, beans, apples, dried fruits, furniture, stamped goods, etc., should be sent. An exposition will solve the difficulty that now presents itself in the introduction of some American products. In dealing with the buyers of this country, samples are absolutely essential.

LABOR.

I append a tabulated statement of wages, but it must be borne in mind that the cost of living is very much higher than in America. A ride on the street car costs 12 cents; a pair of shoe strings 6 cents, and board $10 per week.

Situations for clerks, bookkeepers, salesmen, etc., are scarce. There are, in fact none, all having been filled by men who came here years ago, more particularly from Great Britain. Many have returned to their old homes, and many are here stranded. This office is besieged by hundreds of Americans in want and asking for help. Some have come and succeeded, but they brought sufficient funds to carry them over. There are always, in good times, openings for skilled mechanics. The great bulk of Americans have gone to the mines, but the situation there is deplorable. The wages given are those paid in Cape Town; in the country they are increased, but the cost of living is proportionally higher. The amounts given are the maximum:

Workmen.	Wages.	Workmen.	Wages.
Bookbinders.......per week...	$12.00	Hack drivers.......per week...	$7.00
Blacksmiths.......do......	15.00	Housemaids, with board...per month...	17.00
Bricklayers.......do......	19.50	Masons.......per week...	15.00
Boiler makers.......do......	16.50	Molders.......do......	16.50
Bakers.......do......	16.50	Machinists.......do......	15.00
Bookkeepers.......per month...	75.00	Painters.......do......	7.00
Cooks, with board.......do......	50.00	Plasterers.......do......	15.00
Coachmen, with board.......per week...	6.25	Tinsmiths.......do......	15.00
Compositors.......do......	15.00	Tailors.......do......	20.00
Carpenters.......do......	18.00	Plumbers.......do......	20.00
Curriers and tanners.......do......	20.00	Pipe fitters.......do......	20.00
Cabinetmakers.......do......	20.00	Porters.......do......	5.00
Clerks.......per month...	50.00	Wagon drivers.......do......	7.00
Engineers.......per week...	15.00	Wagon makers.......do......	15.00
Gas fitters.......do......	15.00	Waiters, with board.......per month...	30.00
Harness makers.......do......	15.00	Salesmen.......do......	60.00

J. G. STOWE,
Consul-General.

CAPE TOWN, *April 1, 1898.*

TRANSPORTATION IN NICARAGUA: DECISION OF ARBITRATOR (CORRECTION).

The Department is in receipt of a letter from Gen. E. P. Alexander, dated San Juan del Norte, April 12, 1898, in regard to a report transmitted by Mr. William B. Sorsby, United States consul at that place, and published in CONSULAR REPORTS No. 212 (May, 1898). General Alexander was the arbitrator in the transportation question referred to in the report, and he wishes to say that the statement in the report, to the effect that the decision had interrupted traffic, was misleading. He continues:

> The adverse decision was not given until February 18. The suspension of all traffic and the formal taking possession of the boats took place on or before the 7th. The occasion of this action was the breaking out of the recent revolution, and its actual occurrence is referred to in the decision as justifying the Government in

the precautionary placing of the guards in question. Tranquillity is not yet restored, and the Government is still in possession; but the company's agent here informs me that the company is, and always has been, ready and anxious to resume operations whenever the military situation will permit the Government to surrender control.

GERMANY'S TRADE WITH SOUTH AMERICA.

The successful attempts of the United States to improve its commercial relations with South America have excited the interest of the German trade to a high degree, and, now that the first excitement about China has subsided, the influential newspapers again turn their attention to South America. Scarcely a day passes that an article does not appear referring to this subject.

Considering the great success of German industry within the last ten years, it is surprising how very insignificant is the progress of its exports to the South American republics. In 1888, Germany sent to those markets commodities to the value of $41,000,000; in 1896, the export amounted to $41,500,000. This result is the more remarkable, as the imports from South America during the same period have risen from $63,500,000 to $79,700,000. There is thus a growth of the imports of more than $16,000,000, against an increase in exports of about $500,000.

Upon examining the most important articles of export from Germany to South America, one can not help noticing that they are almost exclusively products of the German textile and iron industries—closely woven cotton cloth, hosiery, worsted goods, and coarse ironware. Only in a few instances have bottled beer, fine woodwork, sugar, printing paper, and faïence been classed among the more important articles.

The following table shows the changes which have taken place in the German exportations in the four classes of goods named (in double cwts., equal to 220.46 pounds):

To—	Cotton cloth.		Hosiery.		Coarse iron.		Woolen goods.	
	1896.	1897.	1896.	1897.	1896.	1897.	1896.	1897.
Argentine Republic	11,079	5,406	2,967	2,879	40,705	26,765	3,629	3,124
Brazil	15,329	10,056	3,613	2,822	50,592	37,659	6,137	3,255
Chile	10,595	12,105	2,589	3,901	24,644	14,037	5,635	4,286

The result of the export to these three States of South America (the most important for German trade) is, therefore, very discouraging for the manufacturers here. Exports to the Argentine Republic and Brazil decreased considerably in 1897. For other articles, the following figures are given:

Articles.	1896.	1897.
Argentine Republic.	*Dbl. cwts.*	*Dbl. cwts.*
Coppered iron wire	226,764	200,034
Cartridges	9,151	7,312
Brazil.		
Iron rails	178,259	7,163
Fine ironware	11,753	9,063
Fine wooden ware	6,324	2,767
Cast-iron machinery	6,137	3,255
Chile.		
Rifles	*1,978	....
Candy and loaf sugar	60,642	58,447

* Value nearly $650,000.

The decrease in 1897 applies also to other countries of South America, as shown by the following table:

Country.	Cotton cloth.		Hosiery.		Coarse iron.		Woolen goods.	
	1896.	1897.	1896.	1897.	1896.	1897.	1896.	1897.
	D. cwts.	*D. cwts.*	*D. cwts.*	*D. cwts.*	*D. cwts.*	*D. cwts.*	*D. cwts.*	*D. cwts.*
Colombia	2,319	2,184	642	710	6,817	6,929	1,476	1,496
Peru	4,203	2,829	925	1,058	3,172	3,348	1,287	916
Uruguay	2,778	1,517	1,303	780	3,020	1,575	1,328	894
Venezuela	2,782	1,442	547	400	5,301	6,441	309	183

The result is, relatively, somewhat better as far as these four countries are concerned, but even here the balance inclines to loss.

The trade with Uruguay shows a falling off of the German exports in 1897 in every class of goods, even those not mentioned above. Germany's exports to Uruguay in 1896 and 1897 were as follows:

Articles.	1896.	1897.
	Dble. cwts.	*Dble. cwts.*
Coppered iron wire	57,572	39,272
Fine ironware	930	722
Cast-iron machinery	4,129	623
Yarn	177	85
Printing paper	7,615	4,095

As regards Venezuela, the German exports in coarse ironware show an improvement; but the decrease in textiles, bottled beer, and faïence is serious. The trade has been better in Peru and Colombia. It shows good results in cotton hosiery and coarse ironware; also, in worsted goods to Colombia. On the other hand, there has been a decline of exports of cotton cloth and ironware.

German exports to Bolivia and Ecuador in 1896 and 1897 were as follows:

Articles.	1896.	1897.
Bolivia.	*Dble. cwts.*	*Dble. cwts.*
Cotton cloth	1,370	807
Worsted goods	695	498
Ecuador.		
Cotton cloth	1,263	1,771
Hosiery	327	469
Coarse ironware	1,164	2,145
Rifles	*459	....

* Value, $148,000.

The trade with Paraguay was too insignificant to mention.

Taking the result of this review, one finds that the German exports to the Argentine Republic, Brazil, Bolivia, and Uruguay have, in 1897, fallen off in every article of importance. Venezuela, Chile, and Peru show only one or two of all the classes of goods enumerated in which the exports have improved. In the other states, which are of minor importance, the gains in the exports do not balance the losses; so that the total amount of the export trade with South America has considerably declined.

The value of German exports to the Argentine Republic, Brazil, and Chile rose from $32,600,000 in 1889 to $33,000,000 in 1896, while the exports from these countries to Germany increased from $58,300,000 in 1889 to $68,500,000 in 1896. In 1889, Colombia, Peru, Uruguay, and Venezuela exported to Germany $3,800,000 worth; in 1896, $9,300,000. The German exports thither, however, fell from $7,600,000 in 1889 to $7,100,000 in 1896. In 1889, Bolivia, Ecuador, and Paraguay sent to Germany $666,000 worth; in 1896, $1,120,000; and bought from Germany $1,214,000 worth in 1889 and $1,761,000 in 1896. Of all the South American republics, only two—Peru and Bolivia—bought more goods from Germany than they sold thereto.

Opinions as to the causes of this decrease are divided; some think that German exporters do not consider the economic and political condition of South America stable enough, and believe that they can operate there only with the utmost caution; others believe, on the other hand, that German trade with those countries is handicapped by the lack of commercial treaties, and that such treaties should be created.

It may be anticipated with certainty that in the near future every effort will be made to conquer the South American market for German industry. This should not be lost sight of by all those in our country whom it may concern.

LOUIS STERN,
Commercial Agent.

BAMBERG, *April 20, 1898.*

HOW TO EXTEND UNITED STATES TRADE IN SOUTH AMERICA.

The establishment of the Caracas warehouse by the National Association of Manufacturers and the proposed exposition in 1899 by the Philadelphia Museums are steps in the right direction and will be of incalculable value in enhancing our commercial relations with Central and South America.

It is time for our people to try to conquer a share of South American trade. A few days ago I was fortunate enough to obtain a copy of the European Economist, from which I take the liberty to quote the following in regard to the business expansion of the Germans in South America:

> It is worth while to study the enormous extension of financial, industrial, and mercantile enterprises of the Germans in South America. We find in Brazil the Brasilianishe Bank, with a capital of 10,000,000 marks,[*] in Rio de Janeiro, São Paulo, and Santos; the Deutsche Uberseeische Bank, with a capital of 20,000,000 marks, in Buenos Ayres and Valparaiso; the Deutsche Bank of Chile, with a capital of 10,000,000 marks, in Valparaiso. Germany is interested in Brazilian mines and railroads to the extent of 62,000,000 marks. In Venezuela the Germans have invested 50,000,0000 to 60,000,000 marks in railroads. A considerable number of industrial enterprises of various kinds have been created in South America under their auspices—breweries, hat and shoe factories, paper mills, coach factories, soap and candle factories, cotton factories, foundries, machine shops, etc.
>
> They have contributed much capital to the foundation of Liebig's meat-extract factories; they have invested millions in the saltpeter mines of Chile and in the mines of Peru. It is not easy to estimate the total of German capital invested in financial and industrial enterprises, but from the best information available we give the following data: In Guatemala the Germans have invested 140,000,000 marks; in Mexico, 184,000,000 marks; in Venezuela, 200,000,000 marks; in Brazil, 600,000,000 marks; and in Chile, 100,000,000 marks.

In my consular district (Maracaibo) we have German houses which export for their own account over $2,000,000 worth of coffee in a year, not to mention other articles. If I should estimate the German capital invested in this district, it would run high into millions of dollars; and it is the same in the other consular districts of Venezuela. Of United States capital, there is not a dollar invested in this district. This foreign capital is one of the obstacles to the expansion of our trade; and there is also the competition with the experience of the

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[*] 1 mark=23.8 cents.

Germans—their thorough business training, their endurance, their knowledge of foreign languages, their patience and attention to details.

In my report printed in Commercial Relations, 1895–96, I explained at length the situation, illustrated the methods employed by the German houses, and insisted that if we wished to share in South American trade we must imitate them.

Our consuls have for years furnished the Department of State with much valuable information and advice, which has been printed in our CONSULAR REPORTS. If they have been read with interest by our own people, they have been also carefully studied by foreigners in Europe and translated into their language, and, I regret to say, in many cases our suggestions have been eagerly taken up by them. Expositions will also benefit our commercial adversaries.

As I suggested in my report printed in Commercial Relations, 1895–96, I believe it would be well for our merchants and manufacturers to send their sons or relatives to South America, to study the language, country, and habits of the people and become acquainted with the business methods of this country. Arrangements should be made with well-situated houses in South America to accept our young men in their business. They should possess some business training before being sent here.

In my opinion, a young man should be able to live in most places in South America on $700 to $800 gold a year. In the space of three to four years he should have mastered the language thoroughly and have studied the customs of the people and the branches of the trade which he intends to follow; in short, he should be fit to open his own business or to attend successfully to the interests of his commercial friends in the United States.

For years, elaborate speeches have been made in meetings of our State boards of trade upon the necessity of taking our share in Central and South American commercial affairs; and thousands of dollars have been spent for beautiful catalogues in the English language, which, I am sorry to say, nobody except our commercial adversaries read here. If a small amount of this money were employed in sending young business men to South America, it would prove beneficial to our interests.

I therefore make the following proposition: Should there be found in the United States ten to twelve young men of commercial training (knowledge of double entry bookkeeping absolutely necessary), of good health and steady habits, possessing sufficient means to defray their expenses for several years, and who are willing to come to Venezuela, I shall be most happy to assist them in their enterprise with my experience of long years' standing. I would find them places in good business houses in my consular district, which embraces the States of Zulia, Falcon, and the Andes. I can also include the eastern part of Colombia, as Maracaibo is the key to that section of the neighboring Republic. I would use my influence to place them in good business houses in the different commercial centers. I believe I could place one young man in Coro, one in Tovar, one in San Christobal, one in Merida, one in Valera, one in Trujillo, two to three in Maracaibo, two in Cucuta, and one in Bucaramanga. These last two places are in Colombia. It is not my opinion that they should remain the entire time at the same place, but interchange, so as to learn as much as possible of this wide territory and its resources, and also to have the benefit of different climates. Tovar, Merida, Trujillo, and San Cristobal are situated in the most lovely, healthy climate of the world, in the Cordilleras, while Cucuta and Maracaibo are hot and are considered very unhealthy.

The consular agents in my district are all men of high standing and commercial influence. They will, no doubt, cooperate with me. I would be pleased to see my idea on the subject given a large circulation.

E. H. PLUMACHER,
Consul.

MARACAIBO, *April 8, 1898.*

UNITED STATES TRADE WITH MALTA.

Trade between Malta and the United States is, I am sorry to say, very limited. At the present time there are but few lines of our goods to be bought here. For the past few weeks I have been making an investigation and find that the people here like American goods, and would patronize us more were it not for lack of direct communication with our country. Years ago, in the time of sailing vessels, the Maltese business men dealt with us quite extensively. Now, American goods consumed here are transshipped through English agents, causing additional expense to the Maltese buyers. Therefore, when a firm here wants a certain line of goods it gives the preference to that of English manufacture. With direct communication between Malta and the United States, there is a good opening for American goods of almost every line, except possibly machinery, there being no factories here of any kind. On the other hand, I believe that Maltese goods, such as lace, which is made quite extensively by the women of these islands and sent to England, France, and Germany, bitter orange peel, squill plant, and several other articles used for medicinal purposes, would find a market in the United States. Again, the soil of Malta produces two crops per year. Early onions and potatoes have been raised to a limited extent and shipped to England. Labor here is cheap; the produce merchant is able to load a vessel with his goods and, at reasonable rates of freight, place them in our markets at almost our lowest quotations and make a good profit. The onions raised here are similar to those from Bermuda, but will keep longer, and are usually packed in coarsely woven baskets holding 140 pounds each. The potatoes are of a superior quality, and would be acceptable in any market. The laboring classes of Malta need but little encouragement, and if a market in the United States were opened by means of direct communication, the production would be much increased.

In CONSULAR REPORTS No. 210 (March, 1898), I read a report written by the consul-general at Calcutta, to the effect that a new line of steamers has just been formed by capitalists to run between Bombay, Calcutta, and New York. If this is true, it means that those steamers will pass Malta en route to the United States, and I see a chance for an increase of trade. I believe, with the consul-general quoted, that the attention of our merchants should be called to this very important matter. Full information as to future plans can doubtless be obtained from Norton & Sons, of New York, the agents of the line. I shall be pleased to give all information possible relative to the market for American goods here, prices, and names of leading business men. I have to-day interviewed one of the chief shipping agents in regard to the new line, and he thinks with me that it would be a good opening not only for the people here, but for the merchants of the United States. Many of those who read this report will be desirous of learning the prices of certain lines of goods here. To quote all would take up much space, and in the prices which I give below I will confine myself to articles of actual necessity, being, as above stated, pleased to give information as to other lines whenever requested.

Articles.	Price.	Articles.	Price.
Groceries.		*Groceries*—Continued.	
Almonds .... per lb.	$0.20 to $0.48	Bath bricks .... each.	$0.03
Ground .... per tin.	.29	Beans .... per lb.	.04
Ammonia .... per bot.	.17 to .22	Beeswax .... do.	.44
Anchovy paste .... per tin.	.11	Polish .... per tin.	.22
Apples .... per 3-lb. tin.	.12	Bird seed .... per lb.	$0.04 to .05
Do .... per gal. tin.	.28	Mixed .... do.	.02
Apple rings, evaporated .... per lb.	.12	Blanc mange powder .... per box.	.10 to .24
Arrow root .... per tin.	.15 to .20	Biscuits .... per lb.	.08 to .36
Asparagus	.22 to .24	Do .... per small tin.	.18 to .72
Baking powder .... per tin.	.08 to .16	Do .... per large tin.	.66 to 2.48
Do .... per doz. pkts.	.18	Blacking .... per bot.	.10 to .80
Barley .... per lb.	.04	Do .... per tin.	.02 to .06
Do .... per tin.	.16	Black lead .... per box.	.12 to .15

Articles.	Price.
Groceries—Continued.	
Blanco for whitening shoes...per tin..	$0.11
Do...per cake..	.02
Blue...per box..	$0.12 to .20
Do...per lb..	.18
Boot-top powder...per box..	.21
Do...per doz..	2.40
Boot grease...per tin..	.11 to .19
Bottled tart fruits...do...	.12 to .23
Bovril:	
In bottles...2 to 4 oz..	.23 to .42
In tins...2 to 8 oz..	.23 to .72
Breeches paste...per jar..	.42
British wines (orange and ginger), per bot...	.32
Brunswick black...per bot..	.11 to .18
Burnt onions...per tin..	.13
Candied peel (citron, lemon, and orange)...per lb..	.10 to .14
Do...per 7-lb. box..	.68 to .96
Candles...per box of 12..	.16 to .22
Do...per 3-lb. pkt..	.30 to .54
Coffee extract...per bot..	.18 to .36
Coffee and milk (Swiss)...per tin..	.20
Corn (American)...do...	.13
Corn flour...per pkt..	.09 to .14
Crystallized fruits...per lb..	.30 to .33
Currants...per lb..	.06 to .10
Capers...per bot..	.26 to .30
Carbolic powder...per tin..	.10 to .16
Celery salt...do...	.11 to .22
Chicory...per lb..	.10
Chillies, dried...do...	.12
Chocolate...per lb..	.30 to .68
Powder...per ½-lb. tin..	.24
Chocolate and milk...	.21
Chutney...per bot..	.21 to .23
Do...per large bot..	.30 to .37
Cockscombs...per bot..	.45
Cocoa...per pkt..	.12 to .24
Do...per ¼ tin..	.18 to .20
Cocoa nibs...per lb..	.28 to .30
Cocoatina...per tin..	.22 to .42
Cocoa and milk...do...	.17 to .24
Cocoanut, desiccated..per ½-lb. tin...	.90
Coffee:	
Whole...per lb..	.34 to .42
Ground...do...	.36 to .42
Curried preparations...per tin..	.26 to .78
Curry paste...per bot..	.18
Curry powder...do...	.14 to .17
Custard powder...per box..	.09
Do...per large tin..	.16
Disinfecting powder...per pkt..	.18
Dog biscuit...per cwt..	4.80 to 5.52
Egg powder...per tin..	.14
Emery cloth...per quire..	.24
Emery powder...per tin..	.10 to .20
Groceries—Continued.	
Essences...per bot..	$0.08
Meat...per tin..	$0.30 to .46
Extract of beef...2-oz. jars..	.26 to .30
Fish...per tin..	.08 to .20
Lobsters...per flat tin..	.25 to .28
Oysters...do...	.09 to .22
Sardines...per ½-lb. tin..	.28 to} .32
Flour...per 14 lbs..	.48 to .68
Self-raising...per 12-lb. bag..	.60
Fruits in sirup...per tin..	.14 to .40
Do...per doz. tins..	1.38 to 4.68
Furniture polish...per bot..	.11 to .15
Gelatin...per lb..	.48 to .72
Ginger...medium jar..	.31
Golden sirup...per 2-lb. tin..	.12 to .14
Groats...per tin..	.09 to .16
Groult's pâtes et farines...per pkt..	.12
Harness blacking...per bot..	.27
Harness dressing...per pt. can..	.23
Harness oil...per bot..	.16
Harness composition...per box..	.08 to .21
Harness soap...per tin..	.14
Herbs, dried...per bot..	.12
Honey...per 2-lb. tin..	.30
Do...per glass jar..	.22
House flannel...per yd..	.10 to .16
Soaps...per box of 3 tablets..	.22 to .54
Do...per tablet..	.06 to .23
Soda...per 7 lbs..	.08
Soups...per 1-lb. tin..	.12 to .23
Do...per 2-lb. tin..	.20 to .42
Spices...per lb..	.10 to .84
Do...per 2-oz. tin..	.07 to .12
Starch...per lb..	.08 to .12
Sugar...do...	.04 to .05½
Sugar candy...	.06
Provisions.	
Bacon...	(*)
Bath chops...per lb..	.15
Hams:	
American...	.18
Finest New York...	.25
Butter...in tins..	(*)
Cheese...per lb..	.15 to .20
Finest American...	.14
Beef in tins...per tin..	.12 to .26
Bovril...per 2-oz. tin..	.23
Brawn...per lb..	.12
Caviare...per tin..	.44
Meats, canned...per 2-lb. tins..	.19 to .38
Pate de foie gras...per tin..	.23 to .52
Pate, ham, tongue, and chicken, per tin...	.21
Rabbit...per tin..	.22 to .34
Sausages...per lb..	.16 to .23
Tongues...per tin..	.24 to .84

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* Subject to market fluctuations.

The above retail prices present a fair average, and are to be considered as prevailing at Malta. It will be seen that many lines of manufacture in the United States are represented, and the prices given will enable those desirous of securing an increase of foreign trade to judge whether they can do so in this market. The population of Malta, according to the last census, was 176,314, including the garrison numbering (men, woman, and children) 12,533.

JOHN H. GROUT, Jr.,
Consul.

MALTA, *April 5, 1898.*

UNITED STATES CLOCKS AT MALTA.

There is no good reason why Malta should not be a purchaser of the cheaper grades of American clocks. At the present time most of the clocks received here are of English, French, or German make, the latter predominating. Very few would retail for more than $10 in the United States, as there is no demand for expensive goods. The demand for clocks is steady, those required being of the metal-alarm variety and small wooden ones. A very few of the American make known as "Peep O' Day" are to be found, and they are valued more than any other make. Clocks of German make resembling them are sold quite extensively, but are not as reliable as timekeepers. This fact is known by the dealers. One of them tells me that he would prefer to sell American clocks, but that he is not acquainted with American houses, and also does not know the addresses of European agents handling our goods. For this reason he deals in German articles. There are many houses here dealing in clocks, and if American manufacturers will take the trouble to send illustrated price lists to the addresses which I give below, I believe it will lead to the establishment of a good trade. Owing to indirect communication, I would suggest that manufacturers taking advantage of the above hint should print on their price lists the addresses of their European agents, so that the Maltese buyer may know whom to order through. Among the prominent houses at Malta dealing in clocks are: Francis Meli, 50 Strada Reale; Joseph Zorzy & Son, 257 Strada Reale; P. Zammit, 149 Strada Sta. Lucia; R. Farrugia, 37 Strada Tesoreria.

JOHN H. GROUT, Jr.,
Consul.

MALTA, *April 7, 1898.*

UNITED STATES TRADE WITH BOHEMIA.

The declared value of exports to the United States from this district in Bohemia, as shown by the records for the quarter ended March 31, 1898, amounted to $352,535, as against $407,483.69 for the quarter ended December 31, 1897, a falling off of $54,948.69. Attached hereto is a table of exports to the United States showing the differences in declared valuations between the quarters ended March 31, 1898, and December 31, 1897, and the values of each item exported from this district during the two periods:

Articles.	Quarter ended—		Decrease.	Increase.
	March 31, 1898.	December 31, 1897.		
Bed feathers	$9,378.71	$3,641.69		$5,737.02
Beer	27,097.97	32,038.44	$4,940.47	
Books	7,394.57	3,078.79		4,315.78
Buttons	1,594.71			
Calfskins	17,268.03	3,921.44		13,346.59
Carlsbad sprudel salt	8,383.45	15,489.41	7,105.76	
Clay	609.12	716.41	101.29	
Collars and cuffs	12,415.74	1,383.89		11,031.85
Cotton goods	12,890.93	2,857.53		10,033.40
Dress goods	3,914.98	22,461.25	18,546.27	
Drugs and chemicals	8,056.54	13,415.22	5,358.68	
Glassware	20,629.57	28,600.56	7,970.99	
Gloves	64,630.52	65,103.90	473.38	
Graphite	1,537.93	601.31		936.62
Gum	2,535.23	1,253.49		1,281.74
Hair, human	14,454.46	6,704.98		7,749.48
Hops	9,032.92	30,863.06	21,830.14	
Laces	563.83			
Linen goods	6,035.14	7,698.43	1,663.29	
Machinery	5,953.34	1,327.68		4,625.66
Metal ware	2,226.36	1,625.31	601.05	
Mineral water	577.52	3,843.20	3,265.68	
Musical instruments	10,974.70	5,332.52		5,642.18
Paper goods	4,631.57	3,288.41		1,343.16
Porcelain and pottery	74,311.38	77,749.93	3,438.55	
Potash	4,169.38	17,855,54	13,686.16	
Sugar-beet seed	4,326.64	5,512.00	1,185.36	
Sundries	612.89	1,305.87	692.98	
Tartar emetic	1,636.05			
Toys	440.99	139.79		301.20
Wool	9,265.20	45,846.44	36,581.24	
Woolen goods	4,984.63			

From this table, the principal cause for this decrease in exportation will readily be seen to be in the articles of wool, hops, potash, and dress goods, clearly showing that our tariff works to the benefit of the American producer and home industries.

SALE OF UNITED STATES GOODS IN BOHEMIA.

While this consulate is doing all it can to promote the sale of American articles in Bohemia, it is a mistake of our exporters to believe that they can succeed in introducing their goods in this market by flooding the various business houses and the consulate with illustrated catalogues and price lists.

In the first place, the receiver of such papers is usually called upon to pay additional postage, which naturally prejudices his mind.

In the second place, all advertisements, catalogues, etc., intended for Bohemia ought to be printed in the German and Bohemian languages, so that every citizen here could read and understand them.

In the third place, I am convinced that while Bohemia is a very good field for certain American manufactures, it will take hard work to introduce them. The easiest and surest way to accomplish this, it seems to me, is to establish a regular American agency here, which would show samples of all goods intended to be sold, and give the price of same. From personal examinations and comparison of prices charged for American and home goods, I am certain that such an agency would be successful and of lasting benefit to our exporters. I would suggest that one man be sent, whom all those desiring to compete in this market should entrust with samples. Such an agent would not need a concession to do business from the authorities here.

Fourth. In conversations with different business people here, I find that a cause for complaint against American exporters is the system of giving prices free on board at New York. The Bohemian buyer is not able to ascertain the freight to be paid, and can not afford to take the chance. Our exporters should tell the business house in Prague for just how much they will deliver goods here, or free on board at Hamburg. They are in a position to contract freights from New York via Hamburg and the River Elbe all the way to Prague; at any rate, they can give the price free on board at Hamburg.

FARMING MACHINERY AND IMPLEMENTS.

Bohemia, I feel warranted in saying, presents a very good field for mowers, binders, seeders, thrashing machines, hay stackers, etc. While at the first glance a person unacquainted with the ways of the people would believe it to be cheaper to employ laborers here to do all such work, I have it from very good authority that it is becoming absolutely necessary for those engaged in farming on a large scale (of whom there are a great many) to employ all kinds of machinery, because of the scarcity of labor in country districts, the men receiving better pay in the cities.

ELECTRIC ROADS.

Bohemia, being the most productive state of the Austrian Empire, will gradually but surely advance in internal improvements. So far but little has been done, and the field is open; especially is this the case with electric roads, elevators, and electric lights. There are in my district a number of electric street-car lines projected, and I believe that with proper effort, United States contractors could successfully compete in this line; at least our firms could furnish the necessary machinery. The horse-car line now in Prague is to be changed into an electric line and to be extended. The city of Pilsen will also construct electric lines. I would suggest that our manufacturers take steps to investigate the possibility of getting their share of this business. I think that someone thoroughly conversant with this line should visit the various places, in order to be able to give figures and offer bids.

NEW CONSULATES.

There have been established here, within the last ninety days, four new consulates, viz: German, English, French, and Swiss.

HUGO DONZELMANN,
Consul.

PRAGUE, *April 12, 1898.*

INCREASE OF AMERICAN TRADE IN CHINA.

In view of the claims now being sent out by the German Government as to the importance of their trade in this part of China, I deem it proper to show that our trade here is not only of more importance than that of Germany, but of any other country, not even excepting England. In the quarterly returns there is not a single article specified as of German origin. I inclose a short summary of our trade up to December 31, 1897.

In my report of December 14* I mentioned the growing importance of our trade in this district, and inclosed a table compiled from the returns of customs for the quarter ended September 30, 1897. On the 8th of this month I received the report of the Chinese customs for the quarter ended December 31, 1897, and have compiled a table on the same lines as the one sent in my report above referred to, which I now submit. Although the annual report has not yet been issued, I have taken the four quarterly reports and added them together. While the result is not as valuable as the detailed reports to be found in the annual returns, it will show that the increase in our trade is on a sound basis; that all English goods show a decided decline; and that, while Russian oil gained 322,800 gallons over the importation of 1894, our oil gained 3,406,270 gallons.

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*See CONSULAR REPORTS No. 210 (March, 1898), p. 344.

It may be of interest to know that one missionary in the interior, at the request of his Chinese friends, has just imported 10 bicycles from the United States. One firm informs me that it has sold 10,000 50-pound bags of flour and has orders for 4,500 more bags, all on account of the activity in naval circles here during the past three months. This house has only just started handling flour, and during its first three months has sold 14,500 bags. In my report on flour (CONSULAR REPORTS No. 207, December, 1897, p. 520) I reported the average annual sale as 17,000 bags.

Table showing the imports of all merchandise which expressly names the country of origin into the port of Chefoo for the quarter ended December 31, 1897, and for the same period of 1894.

Description.	1894.	1897.	Decrease.	Increase.
Drills:				
English.................pieces...	285	2,675	....	2,390
American.................do......	1,020	26,490	....	25,470
Sheetings:				
English.................do......	1,790	1,989	....	190
Indian.................do......	*2,745	500	2,245	....
American.................do......	8,500	93,571	....	85,071
Oil, kerosene:				
American.................gallons...	655,500	1,706,400	....	1,050,900
Russian.................do......	†118,000	102,000	16,000	....

* 1895. † 1896.

Table showing the imports of all merchandise which expressly names the country of its origin into the port of Chefoo for the year ended December 31, 1897, and for the same period of 1894.

Description.	1894.	1897.	Decrease.	Increase.
Drills:				
English and Dutch.................pieces...	19,950	12,090	7,860	....
American.................do......	44,140	163,030	....	118,890
Sheetings:				
English.................do......	44,730	40,900	3,830	....
American.................do......	119,028	436,961	....	317,953
Oil, kerosene:				
Russian.................gallons...	*150,000	472,800	....	322,800
American.................do......	1,873,790	5,280,060	....	3,406,270

* 1895.

JOHN FOWLER,
Consul.

CHEFOO, *March 15, 1898.*
No. 213——4.

COTTON IN CHINA.*

No one can tell the annual production of cotton in China with any degree of accuracy. There are no statistics, either national or provincial, on such subjects. It is estimated that the annual crop in this vicinity and tributary to this point for the use of mills and for export is 1,200,000 piculs (160,000,000 pounds). Probably other parts of China produce three times this amount, making a grand total of, say, 5,000,000 piculs (666,000,000 pounds). This is only guesswork, however.

Very little cotton is imported. The Shanghai mills at one time tried a few bales of Indian cotton as an experiment. It was not satisfactory, being both dirty and of a poor quality of fiber. During the last two years, a few bales of American cotton have been imported and experimented with in the Shanghai mills. While it is not so white, its fiber is longer, and hence it will make a finer yarn than the Chinese cotton. The home demand, however, is for coarse yarn—No. 20 and coarser.

About 420,000 spindles are working in Shanghai and vicinity. Of these, 35,000 have been working eight to ten years; the remainder have been put in since the Japanese war. I understand that 50,000 new spindles will be put in one of the Shanghai mills shortly. No new mills are building. Eighty thousand spindles are working at Wuchang; of these 30,000 have been in operation for about eight years, the remainder one year.

The prospect of a market for American cotton depends entirely on the price at which it can be laid down here. At the present moment the price for native cotton is high. Growers and dealers are holding back the crop, on the theory that the mills must use the Chinese cotton. Practically, the crop is "cornered." Sixteen taels ($10.65 gold) per picul (133⅓ pounds) have been paid for cotton delivered at the Shanghai mills. It has been sold as low as 10½ taels per picul. The average price for the last three years has been 12 taels per picul ($8 gold per 133⅓ pounds). American cotton may, after its superiority is fully demonstrated, bring 1 to 2 taels (62 cents to $1.24) per picul more than the Chinese product; but, until the natural prejudice in favor of the home product is overcome, it is not safe to ask more than the price of Chinese cotton.

In the mills here the average wage is 25 to 30 Mexican cents (10.6 to 13.3 cents United States) per day, and two-thirds of the employees are women. It is not to be assumed, however, that production is cheap in proportion to the low wages. One American will attend to as much machinery as three Chinese. Nor will the native workmen push machinery as we do. They are careless as well, and much time and money are lost in repairs. While the hours of work are long, the Chinese do not work consecutively and steadily. I might say without much exaggeration that a working day in China is divided equally between work, singing, gossiping, and eating. The small-footed women, when employed in factories, must sit down often to rest their maimed feet. The larger footed women working with them demand equal rest. Altogether, the lot of an energetic foreigner who has charge of a Chinese factory is not a happy one, and the cost of production is not cheap in proportion to the day's wages.

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*This report was made in answer to a request for information from a member of Congress. A copy of report was sent to inquirer April 30, 1898.

JOHN GOODNOW,
Consul-General.

SHANGHAI, *March 24, 1898.*

DEMAND FOR STEEL RAILS IN CHINA.

Consul Ragsdale, of Tientsin, under date of March 26, 1898, incloses a dispatch inviting tenders for the supply of 7,000 tons of steel rails; also blanks for proposals. It will be impossible, says the consul, for United States firms to enter proposals in time, but he has reason to believe that bids by cable will be considered and is anxious for United States manufacturers to secure the contract. The inclosures are as follows:

IMPERIAL RAILWAYS OF NORTH CHINA.

RAIL CONTRACT.—INDENT NO. 246.

The directorate invite tenders for the supply of 7,000 tons of steel "Sandberg"-type rails of 60 pounds per English yard, and fastenings in addition.

Specifications and forms for tendering can be procured at railway head office.

Sealed tenders, marked outside "Tender for rails," and addressed to director's office, Tientsin, must be sent in not later than 10 a. m. on May 20, 1898 [extended to May 31 by order of March 28].

Tenders can only be accepted on special forms provided by this office.

A penalty of 15 tael cents shall be paid by contractors for every day any rails remain undelivered after end of November, 1898.

Quotations must be in Hong-ping taels,* and should include freight, insurance, and all other charges (except import duties) laid down on the Tongku wharf.

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* The Hong-ping tael is not mentioned in the United States Treasury list of valuations of foreign currencies. The estimates of value of the tael in the various ports of China, on April 1, 1898, ranged from 60.4 cents (Shanghai) to 66.6 cents (Takao). The Tientsin tael was valued at 64.1 cents; the haikwan (customs) tael at 67.3 cents.

The directors do not undertake to accept the lowest or any tender, and are not responsible for any expenses incurred by intending contractors in obtaining the quotations, etc.

TIENTSIN, *March 25, 1898.* BY ORDER.

IMPERIAL RAILWAYS OF NORTH CHINA.

TENDER FOR RAILS AND FASTENINGS.

We, the undersigned, do hereby offer to supply the rails and fastenings in accordance with the specification to be given by C. P. Sandberg, esq., of 19 Great George street, Westminster, London, S. W.

Payments to be made in Hong-ping taels ten days after each complete shipment has been landed.

Per ton.

Seven thousand tons steel rails, 60 pounds per yard, at..........................
Fish plates as needed, plus 5 per cent, at..
Bolts as needed, plus 10 per cent, at...
Spikes, 165 tons, at...

Total cost.
Averaging taels per ton.
Makers.

Signature.
Address.
Date.

NOTE.—Tenders in other currency or in any other form can not be admitted.

IMPERIAL RAILWAYS OF NORTH CHINA.

INDENT NO. 246—SPECIFICATION.

Type.—The rails must be of new 1894 design of C. P. Sandberg, esq., who will give specifications, timplates,* and watch manufacture, whether in Europe or America.

Weight.—Weight of rail, 60 pounds per yard.

Quantities.—Rails, 7,000 tons; fish plates as needed, plus 5 per cent; bolts as needed, plus 10 per cent; spikes, 165 tons.

Note.—This design is entirely different from any rails yet made for China. Weights of fish plates, etc., can not be given here, owing to drawings not being to hand.

Length.—The length shall be 30 feet; the proper percentage of short rails to be decided by C. P. Sandberg, esq.

Marking.—Each rail must bear the name of maker and date of manufacture in letters at least 1 inch high.

Quality.—The rails must be of the very best quality and must be made either by the Bessemer or Siemen's acid process (on no account will basic steel be accepted); without being brittle, they must be hard and most durable.

Test.—Shall be indicated by C. P. Sandberg, esq., with a view to secure above quality.

Acceptance.—The rails will not be accepted in China unless each is stamped with inspector's mark and a proper certificate is produced from Mr. Sandberg stating number and nature of tests, together with accurate analysis of metal. The cost of inspection will be paid by directors. All bent or injured rails will be rejected on landing or purchased at reduced price fixed by district engineer at Tongku. All rails unaccompanied by a proper proportion of fastenings will be held as rails not delivered.

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* As in the original.

Fine.—A fine of 15 tael cents per ton shall be paid by contractors for each day any rails remain undelivered.

Delivery.—The rails must be landed on Tongku wharf not later than November 15, 1898. The contractors shall land rails, etc., at their own risk and cost.

Payments—Payments will be made ten days after acceptance.

C. W. KINDER, M. I. C. E.,
TIENTSIN, *February 24, 1898.* *Engineer in Chief.*

OPENING OF TREATY PORTS IN CHINA.

The Emperor of China has, by decree, opened the following places as treaty ports: Yo-chou, in the province of Hunan, San-tu-ao, in the jurisdiction of Fuh-ning, in the province of Fukien; and Chin-wang-tao, in the jurisdiction of Fuh-ning, in the province of Chihli.

I inclose a translation of the Yâmen's note in regard to the opening of these ports.

Yo-chou is situated at the mouth of the Tungting Lake, in Hunan, and is about 130 miles from the treaty port of Hankow. A very large trade is carried on there in native produce. It is a military and customs station, and is the first place opened to foreign trade in the province of Hunan. It is believed that a good carrying trade will be developed when foreign steamers commence running there, which will, no doubt, be in the near future.

San-tu-ao, in the province of Fukien, is a place better known among foreigners as Samlah Inlet. The entrance to this inlet, 10 miles to the westward of Spider Island, is 1¾ miles wide, with deep water and strong tides. The bay extends to the northward 13 miles, terminating in a sandy isthmus, over which Funing Bay is seen. Very little is known about this part of Fukien, but it is said that there is an extensive trade carried on from the mainland, in junks plying up and down the coast. Recently the Germans are reported to have explored the place, and at one time, previous to the occupation of Kiaochou, it is believed that it was considered desirable as a naval and coaling station.

Chin-wang-tao is on what the admiralty charts call "Shallow Bay." It is between Creek Point and Rocky Point, about a mile deep and clear of rocks, and the shore is sufficiently steep to allow large boats to land easily. The depth is 2 fathoms at half a mile, and 4½ fathoms at 2 miles from the shore. A reef of rocks, which generally breaks, encircles Rocky Point at half a mile distant.

Shallow Bay is the place where the foreign mails were landed during the winter, and I understand that it is intended to serve as an outlet for the coal country behind. It is a short distance north of the new summer resort called Pei-tai-ho.

CHARLES DENBY,
PEKING, *April 3, 1898.* *Minister.*

THE TSUNGLI YÂMEN TO MR. DENBY.

PEKING, *March 31, 1898.*

YOUR EXCELLENCY: The princes and ministers have the honor to inform the minister of the United States that it has been decided to open the following additional places as treaty ports, in order to develop and extend trade. Yo-chou Fu, in the province of Hunan; San-tu-ao, in the jurisdiction of the Fun-ning prefecture, in the province of Fukien; and Chin Wang Tao, in the jurisdiction of the Fu-ning district, in the province of Chihli.

The Yâmen, on the 24th of March and other days, memorialized the Emperor in regard to the matter, and have now received His Majesty's decree sanctioning the opening of the above-named places as treaty ports.

As soon as the time has been fixed for the establishment of custom-houses at these places, due notice will be given to the minister of the United States.

In the meantime the princes and ministers send this communication for the information of the minister of the United States.

OPENING OF INLAND WATER ROUTES IN CHINA

I inclose an extract from a Shanghai journal, describing what is about to become an important event in the history of China. As is stated, the canals are the roads in China. This fact is so well known at home that it is not necessary to again describe them.

In volume 3 of Special Consular Reports, "Streets and Highways" (1891), will be found, I think, a few remarks of mine upon this subject; also in CONSULAR REPORTS Nos. 152 and 192; and in Special Consular Reports, "Canals and Irrigation," there are more reports.

In view of the opening of the waterways to foreign vessels, no better field in the world will be found for our small boats, tugs, and steamers. Imagine every railroad in America removed and a canal substituted, and one will form some idea of the magnitude of the system in this vast Empire. It is only within the past few weeks that a small steamer has made its appearance at Chungking, and I remember well the fierce opposition that arose when the first launches began to run on the canals between Shanghai and Hangchow.

China has gone too far for a backward move, and it is now or never that our merchants must be on the alert, for the Chinese will not wait for us, and, once they form business connections, it is almost impossible to get them to change. The few American houses in China are old-established firms, and have so much to attend to that they can not control the introduction of anything out of their regular line, and perhaps do not care to.

It is my impression that China offers a good opportunity for the establishment of an American company for the building of small boats and launches. There are a few dock and shipbuilding companies owned by Chinese or British firms, which have been veritable gold mines to their shareholders. It is certain that they will not be able to supply the demand, should it be true that the inland waters are to be opened in June.

JOHN FOWLER,
Consul.

CHEFOO, *March 25, 1898.*

[From the North-China Daily News, Shanghai, February 26, 1898.]

The news we published on Tuesday that the Chinese Government has consented to admit foreign and native steamers to all inland waters is confirmed by later advices, and there would seem to be no doubt that this important concession has actually been obtained. We are still in the dark as to the negotiations which have resulted in this important agreement, and we have yet to learn what has persuaded the authorities in Peking to take a step which evinces a degree of wisdom and foresight beyond anything we have been accustomed to look for in that quarter. There are two aspects of the question which immediately attract attention. From the foreign point of view, the concession should mean an enormous increase in the trade, and from the Chinese it should mean not only increased wealth and enlightenment, but also the safeguarding of the integrity of the Empire. That so radical a change should come into full operation in the short delay of four months is difficult to believe. The peculiar but deep-seated conviction of Chinese officials, that commerce exists only that it may be taxed for their support, will undoubtedly lead to attempts to restrict in every possible way the freedom which is essential to an expanding trade; and vexatious regulations, founded upon the supposed necessity of protecting their private interests, but supported by plausible arguments, will no doubt be persistently proposed and, it is to be hoped, vigorously objected to. The foreign trade of China, capable of enormous expansion, has increased but slowly. The opening of new treaty ports, although a move in the right direction, has never brought about the increase which was expected, and the explanation is simple. Owing to the want of means of communication, only restricted areas can be served without a cost for carriage which is prohibitive. The people can not purchase imports unless they can sell their exports in exchange for them, and without cheap carriage they can not place their exports on the market at a reasonable figure. The inland waters are the roads of China, and if once they are thronged with steamers, one of the greatest obstacles to trade now existing will have been removed. As regards foreign goods, the transit-pass system, which has shown considerable development, especially in the south, during the past year, should, with some modifications, make everything easy. It seems to us that it is the traffic in native goods which will offer the officials the best field for obstruction; for it is not to be supposed that the steamers will carry back only goods destined for export to foreign countries. This class of goods can, of course, obtain the protection of transit passes; but if other native goods are still to be taxed at every likin station, the working of the steamers will be hindered to an extent which will greatly diminish the value of the concession. However, it is premature to discuss these questions before we hear what regulations have been drawn up and agreed to, and we have still to consider the second aspect of the question.

China has hitherto aroused a feeling of antagonism simply on account of her exclusiveness. The enormous possibilities of trade, which the nations of the west believe to exist in this country, have naturally excited competition. Hitherto it has been found that trade was only to be gained by force or threats, and a tendency has lately become manifest to take action which, if not checked, would undoubtedly lead to the dismemberment of the Empire. "Sphere of influence" is a convenient phrase for glossing over what is apt to become actual control, and by agreements among the powers that any "sphere of influence" should be open to the trade of all of them on equal terms, it is conceivable that we might see rapid developments in this direction which would soon leave very little of China independent. But if the Chinese adopt a liberal policy and throw their country open freely to all, it is evident that the old grievances will no longer exist. China becomes one of the comity of nations, and her interests become those of her friends and customers. Any attempt on the part of one nation to obtain a preponderating influence which might be used to the advantage of its own commerce and to the detriment of that of the others, would at once arouse diplomatic resistance. Is it possible that the Chinese are at length awakening to this view? We are at the beginning of a great change which will have stupendous issues. Let the Chinese once realize that they are safe from aggression as long as they are friendly, and that they secure the protection of foreign nations by utilizing foreign capital and foreign enterprise, and we shall see this country make such strides as may in time make it one of the richest and most powerful in the world.

FIRECRACKERS IN CHINA.*

During the year ending June 30, 1897, there were exported from China 26,705,733 pounds of firecrackers, valued by the Chinese imperial customs at 1,993,082 haikwan taels, equaling, at the average rate of exchange during that time, $1,584,151 gold. The entire export was from the province of Kwangtung. The shipments from the different ports were as follows:

	Pounds.
Canton	1,067,200
Kowloon	24,074,267
Lappa	907,733
Swatow	656,533

Of the total shipment, by far the largest part was sent by sailing vessels to New York. A small quantity went to England. Other countries buy only infinitesimal amounts.

During that year freight to New York ranged from $2.25 to $4.25 per ton (40 cubic feet), varying with the rate of exchange and with the number of sailing vessels seeking cargo.

The exports represent only a small fraction of the amount manufactured and used in China. There are no large manufactories; the crackers are made in small houses and in the shops where they are sold. In the latter places the proprietor of the shop, his wife (or wives), and children do the work. No record is kept of the number made and sold, and no estimate is possible of their cost. The use of crackers is universal in China, and has been as far back as history records. It is most probable that in the beginning they were used to frighten away evil spirits. Now they are most frequently an expression of good feeling or of ceremonious compliment. They are used at weddings, births, and funerals; at festivals; religious, civil, and military ceremonies; at New Year; to salute persons about to make a journey; and, in fact, on all occasions out of the ordinary routine.

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* This report was made in reply to a request for information from a resident of Ohio, to whom ADVANCE SHEETS have been sent.

In making crackers, only the cheapest kind of straw paper which can be produced in the immediate locality where the crackers are made is used for the body of the cracker. A little finer paper is used for the wrapper. A piece of straw paper 9 by 30 inches will make twenty-one crackers 1½ inches long and one-fourth of an inch in diameter.

The powder is also of the cheapest grade, and is made in the locality where used. It costs 150 to 175 cash per catty, or 6 to 7 cents gold per pound.

For the fuse, a paper (called "leather" in Shanghai) is used, which is imported from Japan and is made from the inner lining of the bamboo. In other places a fine rice paper is used, generally stiffened slightly with buckwheat-flour paste, which, the Chinese say, adds to its inflammability. A strip of this paper one-third of an inch wide by 14 inches (a Chinese foot) long is laid on a table, and a very little powder put down the middle of it with a hollow bamboo stick. A quick twist of the paper makes the fuse ready for use.

It is not easy to persuade the Chinese to exhibit their modes of manufacture to a foreigner; but Mr. Williams, vice-consul at Shanghai, thus describes the work as he has seen it.

> The straw paper is first rolled by hand around an iron rod, which varies in size according to the size of cracker to be made. To complete the rolling, a rude machine is used. This consists of two uprights supporting an axis, from which is suspended by two arms a heavy piece of wood, slightly convex on the lower side. There is just room between this swinging block and the top of the table to place the cracker. As each layer of paper is put on by hand, the cracker is placed on the table and the suspended weight is drawn over the roll, thus tightening it until no more can be passed under the weight. For the smallest "whip" crackers, the workman uses for compression, instead of this machine, a heavy piece of wood, fitted with a handle like that of a carpenter's plane. In filling crackers, two hundred to three hundred are tied together tightly in a bunch. Red clay is spread over the end of the bunch and forced into the end of each cracker with a punch. While the clay is being tamped in, a little water is sprayed on it, which makes it pack closer. The powder is poured in at the other end of the cracker. With the aid of an awl the edge of the paper is turned in at the upper end of the cracker, and the fuse is inserted through this.

The long ends of the fuses are braided together in such a way that the crackers lie in two parallel rows. The braid is doubled on itself, and a large quick-firing fuse inserted, and the whole is bound with a fine thread. The bundle is wrapped in paper and in this shape sent to the seacoast.

A variety of cracker I do not remember to have seen in the United States, but which is popular here, is the "twice sounding." It has two chambers separated by a plug of clay, through which runs a connecting fuse. There is also a fuse extending from the powder in the lower chamber through the side of the cracker. When the cracker is to be fired it is set on end, and fire set to the fuse. The powder exploding in the chamber throws the cracker high in the air, where the second charge is exploded by fire from the fuse extending through the plug between the two chambers. In the manufacture of these, the clay is first tamped in with a punch to form the separating plug. The lower chamber is then loaded with powder and closed by turning over the paper at the end. The upper chamber is loaded and closed with clay. A hole is punched in the side of the lower chamber with an awl, and the fuse inserted through this opening.

At Canton the ordinary-size cracker (1½ inches long by one-fourth of an inch in diameter) costs 1 tael (62 cents) for 10,000 for export. At Hankow the best quality of this size costs 1 tael for 5,000; while of the second quality 20,000 can be bought for 1 tael. At Chungking 15,000 of the ordinary crackers can be bought for 1 tael. At Shanghai 1 tael will purchase 5,000 of the ordinary size, while the largest sell for $5 per thousand. These prices are probably only a shade above the actual cost of manufacture. The small manufacturers sell to Chinese compradores, who buy as agents of foreign firms and ship the crackers in bundles to the seacoast, where they are packed in boxes which cost about 4 taels ($2.50) per hundred, and hold 250,000 firecrackers.

Aside from the fact that all the material used is native and produced where the crackers are manufactured, and that transportation does not enter into the cost, the wonderful cheapness of manufacture is accounted for by the kind of labor used and the wages paid. The items of cost of plant and interest on it are eliminated by the fact that the crackers are made in the homes of the workmen, and in the shops where they are sold. The hours of labor are from 6 a. m. to 11 p. m., and there are seven working days in each week. Four-fifths of the crackers consumed in China are made by the families of those who sell them; these people, of course, receiving no wages. Of the paid work, a very large proportion is done by women and children who are paid by the piece. It is estimated that 30 women and 10 men can make 100,000 crackers per day; for which work the women will receive 5 cents each and the men about 7 cents each. An apprentice is bound for four years, and during that time receives only his board. At the end of that period he will receive, if he is a fairly good workman, 150 cash per day, or 7 cents in United States money. An expert at the trade receives 200 cash per day, or 10 cents gold.

Workmen at this trade receive about the average rate of wages paid here for common labor. The trade is considered unhealthy and dangerous, and therefore not desirable.

JOHN GOODNOW,
Consul-General.

SHANGHAI, *December 31, 1897.*

COTTON GOODS IN BRITISH INDIA.*

During the year 1896–97 there were imported into British India 1,222,920,000 yards of gray unbleached goods; 414,154,000 yards of white bleached; and 339,916,000 yards of colored, printed and dyed. The detailed imports under these three different heads were as follows:

Gray.—Jaconets, 96,189,000 yards; mulls, 20,211,000 yards; prints, 959,000 yards; shirtings, 581,226,000 yards; madapollams, 31,337,000 yards; T cloth and domestics, 13,058,000 yards; jeans, sheetings, and drills, 22,594,000 yards; chadars, dhutis, saris, and scarves, 455,220,000 yards.

White.—Jaconets, 33,057,000 yards; nainsooks, 119,890,000 yards; mulls, 84,980,000 yards; shirtings, 69,751,000 yards; long cloths, 2,278,000 yards; cambrics, twills, muslins, and lawns, 12,044,000 yards; chadars, dhutis, saris, and scarves, 53,172,000 yards.

Colored.—Jaconets, 5,187,000 yards; mulls, 4,872,000 yards; prints and chintzes, 129,702,000 yards; shirtings, 45,060,000 yards; drills, 5,259,000 yards; cambrics, twills, and muslin, 74,757,000 yards; chadars, dhutis, saris, and scarves, 29,459,000 yards.

It appears that goods made of medium counts, say from 30s to 40s, constituted last year about 97 per cent of the whole imports of gray goods, thus: Shirtings, chadars, dhutis, saris, and scarves, 84.7 per cent; jaconets, mulls, and madapollams, 12.1 per cent.

The proportion of piece goods received from the United Kingdom was: Gray piece goods, 99.5 per cent; white, 99.1 per cent; and colored, 97.9 per cent. The trifling quantity not received from that country was mainly from the Continent and the United States.

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*This report is in answer to inquiries by the director of the Philadelphia Museums, to whom ADVANCE SHEETS have been sent.

Besides the three great classes of piece goods—gray, white, and colored—referred to above, the other kinds of cotton manufactures imported are chiefly handkerchiefs and shawls in the piece, lace and patent net, hosiery and sewing thread.

Calcutta is the great distributing point for Bengal, which imports more than all other provinces together, including Burma.

It is impossible to give the manufacturers' prices and the retail prices, there being so many different qualities of the same class of goods.

The transportation charges can be ascertained from Messrs. Bucknall Bros., New York agents of the line of steamships that has recently been established between New York and Calcutta, with monthly sailings, touching at Bombay. This line will save transshipment of goods from the United States, and should greatly reduce the cost of transportation, besides facilitating trade by saving time.

The duty on all cotton goods is 3½ per cent ad valorem.

Cotton goods are imported in bales and cases. Gray goods generally are packed in bales; bleached goods and fancy styles in cases.

The following are the principal importers of cotton goods in Calcutta: Ralli Bros., Graham & Co.; Gladstone, Wyllie & Co.; George Henderson & Co., Andrew Yule & Co., Duncan Bros. & Co., Ernsthausen, Limited; Jules Karpeles & Co.; E. D. Sassoon & Co.; Hoare, Miller & Co.; Finlay, Muir & Co.; and Ewing & Co.

I trust that the attention of our cotton manufacturers may be attracted to India as a market for their goods.

When it is considered that there are nearly 250,000,000 people in this country, whose principal clothing is cotton, the possibilities for extension of trade are obvious. American goods have a good reputation here, being made from a superior quality of cotton, and with competent active agents in the field to ascertain just the styles of goods required, I have no doubt that our manufacturers would successfully compete with those of the United Kingdom, who now practically control the market.

R. F. PATTERSON,
Consul-General.

CALCUTTA, *March 30, 1898.*

AMERICAN PETROLEUM IN JAVA.

I inclose translation of an article in a Batavian paper, from which it will be seen that the Standard Oil Company, in its efforts to extend its business, has concluded to enter the oil-producing field in this part of the world. Its latest and most important step to that end was to arrange for the control of the Moeara Enim Company, a company recently incorporated here for working certain petroleum concessions in Sumatra, as described in the inclosed article. To consummate the deal, however, it was necessary to obtain permission from the Minister of Colonies, who evaded giving an official refusal, but recommended the Moeara Enim Company privately to withdraw the project. This was done, and so the deal is off.

This result was universally expected here, and there was general rejoicing. It was freely admitted that the absorption of the Moeara Enim Company by the Standard Oil Company would be beneficial to the oil interest of the colony, in that cost of production, facilities of transportation, etc., would be combined and cheapened in the long run; but the people are very conservative.

SIDNEY B. EVERETT,
Consul.

BATAVIA, *March 18, 1898.*

[From the Bataviaasche Nieuwsblad of March 14, 1898.]

MOEARA ENIM PETROLEUM COMPANY.

The mail brought us the proposal made by the board or directors of the said company to the stockholders to sell their concession to the Standard Oil Company, a question which has been much discussed of late. The proposition, however, through the intervention of the Minister of Colonies, has since been withdrawn. It reads as follows:

"As is well known, the Moeara Enim Petroleum Company, whose subscribed capital amounts to 4,000,000 florins ($1,608,000), has in cash only 3,000,000 florins ($1,206,000) to work the extensive concessions in its possession situated in the Palembang district. The directors find that this capital may be deemed sufficient only for the purposes of getting the oil out of their ground and of erecting a large refinery on the embankment of the Moesi River, but that considerably more capital is required for a rapid and firm development of the whole enterprise, necessitating the purchase of ships for transporting the oil and the establishment of tank stations, with their appurtenances, in various ports of the East.

"Under these circumstances, and considering the strong competition now prevailing in the oil market (which, during the next few years, will become still keener), the directors think it advisable to avail themselves of the chance offered to cooperate with a larger and more profitable concern, namely, with the Standard Oil Company, of New York.

"Such would be arranged by floating a new Dutch company, to be established at Amsterdam with a nominal capital of 30,000,000 florins ($12,060,000), divided into shares of 100,000 florins ($40,200), of which capital 10,000,000 florins ($4,020,000) would be paid up at once. In the last-mentioned amount the Moeara Enim Company would own 4,000,000 florins ($1,608,000) worth, representing the value of its concessions and franchises in Palembang, to be turned over to the new concern, and that of any further acquisitions or possessions there, as well as the balance of its available capital.

"The Standard Oil Company, on the other hand, would pay in 6,000,000 florins ($2,412,000) cash.

"In case an increase of capital is needed, the Standard Oil Company would have to place a further sum of 2,000,000 florins ($804,000) at the disposal of the new company. If still more is needed, such surplus is to be supplied by the Moeara

Enim Company and the Standard Oil Company jointly, in the ratio of 1 : 2; in other words, for every 1,000,000 guilders paid in by the Moeara Enim Company (over and above the original amount) the Standard Oil Company must subscribe 2,000,000 guilders.

"The Moeara Enim Company shall, in case this arrangement goes through, play only a passive rôle and derive its profit exclusively from its share in the new company.

"Neither company would be allowed to sell its shares in the new company to other parties until the expiration of twenty years, but the Standard Oil Company would have for five years the option of buying out the Moeara Enim Company's interest at 300 per cent.

"Any transfer of the concessions and properties of the Moeara Enim Company by the proposed new company would be permitted only by special consent and approval of the Moeara Enim Company.

"The object of the new company would be, in the first place, to develop the concessions of the Moeara Enim Company to the greatest possible extent, with the power to bring in other promising concessions. It would be assisted from the outset by the Standard Oil Company in every possible way.

The first president of the new company would be the present president of the Moeara Enim Company, Mr. J. W. Ijzerman, and the Moeara Enim and Standard Oil companies would be represented in the board of directors in proportion to their respective interests.

"The following advantages would be derived by the Moeara Enim Company from the above-described deal:

"First. All difficulty in getting more capital would be permanently done away with.

"Second. The most extensive possible development of its concessions would be insured, since the ability and long experience of the Standard Oil specialists would be utilized in every branch, viz: For the production of crude oil, the erection of refineries, the preparation of oil for the market, etc.

"Third. All obstacles to the opening of markets for its oil would be removed, because the mercantile relations of the Standard Oil Company in the East would be taken advantage of at once.

"True, amalgamation with the Standard Oil Company would mean abandonment of an independent position; but, considering that the interests of both companies are so intimately connected, and that no company which has cooperated with the Standard Oil Company on a cordial footing has ever had to complain about the latter's conduct of business, the board of directors is of opinion that this disadvantage should not be taken too much into consideration.

"On the contrary, the above-mentioned advantages carry so much weight with the board of directors that they unanimously and confidently advise shareholders to authorize the directors to proceed on the above-described terms to close a definite contract with the Standard Oil Company."

BICYCLES IN CHINA.

The trade in bicycles in China increased very rapidly during the past season and gives promise of even more rapid expansion during the season now opening. Prior to 1897 very few bicycles were in use on this coast, while now, in all ports where cycling is possible, the habit is becoming almost universal among foreigners. Society here is dominated by the English, who claim that no man or woman can hope to endure this climate unless they devote considerable part of each and every day, rain or shine, to outdoor exercise and sports. Horseback riding has been universal among those who can afford that luxury; others take long walks daily. The bicycle appeals to all—rich, middle class, and poor—and all classes are using it. The city of Shanghai is perfectly flat, and some of the roads in and immediately around the settlements are good. Each nationality has generally bought wheels made in their own home country, and at first the English wheel, with brake, mud guard, and heavy tubing, predominated. I believe that now the more graceful and lighter American wheels have the larger sale. Retail prices follow very closely those in England and America, a wheel selling for $100 gold in America being sold here for about $235 Mexican ($104.34 United States gold). The slight advance over the market value of $100 gold and the duty (5 per cent) in Mexican dollars is added to guard against the fluctuations in the value of the Mexican currency. The drop in the price of wheels is increasing the number of buyers, and the probability of large sales lies in the direction of low-grade, cheap machines.

No wheels are made in China, nor do I believe they can be made here. No wheels are brought in on a less rate of duty than those from the United States. Under section 30 of the Tientsin treaty of June, 1858, the United States is one of the most-favored nations. Outside of Shanghai the cycle trade can not grow extensively in China. There are no native roads, as we understand that term. There are narrow paths for the pedestrian or the horseman, but generally not wide enough for vehicles; dusty in dry weather, muddy in wet, and rough all the time, they are practically impossible for wheeling. These roads are not maintained by the community, but each landowner cares for the road immediately in front of his land. Not being a public-spirited people, no more is done than can be avoided; each one encroaches on the road in front of him, so as to gain all possible space for cultivation. Only on roads built by foreigners immediately around the larger settlements is cycling possible.

Few Chinese have as yet taken to the wheel. Their clothing is not adapted to exercise, and especially not to the wheel. No man above the coolie class, in middle and northern China, appears in public otherwise than in long clothes—*i. e.*, an outer petticoat reaching to his ankles. The few young Chinamen who ride here either leave off this outer garment temporarily or turn it up and fasten it at the waist. They also bring the long cue of hair over the shoulder and fasten it at the waistband. Their trousers are as long and full and baggy as the average woman's divided skirt in America, and I have not yet seen a Chinaman ride without a chain guard to keep the trousers from catching and tearing. No Chinese women ride. I have seen it stated in American and English papers that it is now common in Shanghai for Chinese ladies to ride in the streets. Nothing can be farther from the truth. The Chinese women of the better class are kept in absolute seclusion from men other than those of their family. This rule has not been broken in the slightest degree. Even in the missionary schools, where the daughters of merchants and mandarins are educated, no man is allowed to see the girls.

Bicycles are now being handled as side lines by firms in every other kind of business, and are being advertised and pushed more than ever before. Circulars sent should be in English, giving the exact net price, with all discounts for cash on draft with the bill of lading. The rate of exchange will be that of the day on which the draft is presented for payment. Any firm desiring to reach trade other than that of the foreigners should send, in addition to the English catalogue, description in Chinese, with illustrations. This is made necessary partly because the Chinese have no mechanical knowledge and partly from the fact that, while dealers and Chinamen from different parts of the Empire can not always understand the spoken language of other parts of the Empire, they all read the same written characters. These descriptions should be as simple as possible, and adapted to a people entirely ignorant of mechanics.

There are several features peculiar to this market which must be taken into account in manufacturing goods for this place. It is not believed here that wood rims will last in the damp climate. Whatever may be the facts, the prejudice here is in favor of steel rims. It is not advisable, in making wheels for Shanghai, for many of the parts to be bright. The climate here is very damp, and any part that can rust will rust. In filling orders for Shanghai, great care should be taken to send exactly what is ordered. The retail merchant here knows and caters to the popular prejudices. Should his order not be exactly or fully filled, the time is so long by mail from here to America that the sale would be lost by the delay in writing to get the order amended. The cost of cabling is such that telegraphic orders are impossible.

The first motor cycles have been seen on the streets here within the last few days. With the flat streets and lack of electric transportation, it would seem that this would be an ideal place for the motor cycle, capable of carrying passengers for hire.

I would suggest to other American manufacturers looking to the Chinese trade, as well as to the cycle makers, the advisability of establishing a permanent exposition in Shanghai for American goods. Practically all foreign trade for the middle and north of China goes through Shanghai. An exposition here will reach the trade of the Yangtze Valley and of the north. Japanese have begun in a small way to exhibit their manufactures at their consulates at the different ports. The amount of labor and time necessary to make an adequate and permanent exposition of United States manufactures would render that an impossible feature of the consular work; yet the fact that Shanghai is the gateway of the Empire, and that an exhibition here would reach three-fourths of the trade of China, would render such an enterprise, I believe, remunerative. The expensive part of the scheme would be the land. When once the building is erected, one, or at most two, energetic Americans would be all that would be needed in the management. All the manual work could be done by low-priced native labor.

The customs report of 1897 shows that in many important products the imports from the United States have increased at the expense of imports from other nations. We are nearer to the market, freights are less accordingly, and the feeling of the Chinese people is more friendly to Americans than to the people of any other nation. Now is the time to push our trade on this coast. I do not believe that any other method will give better or more permanent results than an exposition of United States products at Shanghai.

JOHN GOODNOW,
Consul-General.

SHANGHAI, *April 5, 1898.*

BICYCLES IN KOREA.

Bicycles are used in Korea chiefly by the foreign element. Something over 100 wheels are in use, and of late the natives have begun to ride to some extent. Two ex-cabinet officials of Korea now own wheels. The streets of Seoul are excellent; the country roads seem pretty bad at first, but when one becomes accustomed to riding the narrow footpaths upon the dikes, the whole country opens up as a field for cycling. There are no fences, and these paths run everywhere. American missionaries nearly all use bicycles in making their trips through the country.

There are no domestic manufacturers of bicycles, and one of the great drawbacks to riding is the absence of repair shops, so that each rider has to carry a good line of supplies. Nearly all the wheels used in Korea are made in the United States. Japan comes next as an exporter of wheels to this country. Very few English or

French bicycles are used. A German firm that has been handling American wheels without success, owing to the high price at which they were purchased, is about to introduce a German article.

The duty on United States bicycles is 7½ per cent ad valorem. There are no differential duties favoring the manufacturers of other countries. The only wheel now in stock here is the Remington, which is held at $165 silver (about $83 gold). A good wheel that could be sold for $100 silver ($50 gold) would create a demand for itself. No firms here make a specialty of handling cycles.

The great thing needed to popularize the bicycle in Korea is a repair shop where spokes can be cheaply and quickly replaced and similar matters attended to. In the meantime, manufacturers wishing to start an agency here should see that supplies are to be had without having to send to the United States for them.

In regard to the question, how to bring the American wheel to the notice of the local trade, I would say that I have taken pleasure in placing catalogues, etc., sent to this consulate-general where they will do the most good. I know of no better way of calling attention to the bicycles. The English language is best for this market.

Export prices should be sent with catalogues. One firm has just done this, with the result that a local dealer has announced his intention of ordering from that list and going into the bicycle business.

Small local merchants usually buy for cash. The several large importing houses have branches in New York and elsewhere, and make arrangements to suit themselves.

It seems to me that ladies' wheels are the best adapted for use by the natives here, as the men wear long skirts, which have to be tied up around the waist when riding the ordinary man's wheel.

HORACE N. ALLEN,
Consul-General.

SEOUL, *March 24, 1898.*

BICYCLES IN BRAZIL.

The many inquiries received by this office from cycle manufacturers of the United States justifies the supposition that there is too sanguine an expectation prevalent regarding the chances of the American wheel in the Brazilian market.

It is true, the American bicycle has won an easy triumph over its competitors on this side of the Equator, and principally in Brazil; but the practical results of this fact ought not to be overrated.

I regard it my duty to draw the attention of interested parties to the following conditions:

The bicycle trade is supported in the United States principally by the middle classes, to which the majority of the wage earners belong. These conditions do not prevail in other countries, and especially not in Brazil, where the well-to-do middle class is not very numerous; where the great masses of the working people—the toilers in the fazendas, the hewers of wood and drawers of water, the drivers of oxen and mules—mostly live in abject poverty and are rated as the lower class.

Further, those among the native Brazilians of Latin origin, who are in better circumstances, do not seem to take as kindly to the wheel as their neighbors of Saxon, Teutonic, or Celtic extraction.

Brazil is, at present, in the midst of a great economic crisis; the production of the staple articles has—temporarily, at least—ceased to be remunerative; business is at a low ebb; the opportunities for earning the daily necessities are greatly diminished; and the wages of the working classes, as well as the earnings of professional men, are consequently extremely low.

The majority of the Brazilian people (probably 14,500,000 of the 15,000,000 inhabitants) are at present engaged in such a struggle for existence that they can not extend their ambition to what is regarded here as among the luxuries of life. To a young clerk, for instance, who earns $15 a month, or to an experienced salesman, bookkeeper, or cashier, who is lucky if he can take home to his family $10 a week, a $70 bicycle partakes very much of the nature of things unattainable.

Last, but not least, there are very considerable climatic and topographical difficulties to contend with in nearly all of the Brazilian cities, and particularly here, in the great South American metropolis of Rio de Janeiro; all of which conditions combine to interfere seriously with the development of bicycling and the bicycle trade in Brazil.

EUGENE SEEGER,
Consul-General.

RIO DE JANEIRO, *March 30, 1898.*

BICYCLES IN NORWAY.*

Bicycles may be said to be in general use in this district, although not as extensively as in other parts of Europe; the use being perhaps more limited to the class in comparatively easy financial circumstances. The roads are macadamized and would be adapted to bicycling were it not for the large rainfall in western Norway, which amounts to about 85 inches per annum. The hilly nature of this part of the country is an additional drawback, necessitating as much walking as riding. In spite of these conditions, however, the bicycle continues to grow in popularity. Two domestic manufacturers of cycles are located at or near the capital, Christiania.

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*These reports on bicycles are in answer to a request for information from a New York firm, to whom ADVANCE SHEETS have been sent.

Most of the cycles sold in this district are from Germany and the United States.

The duty on cycles is 30 kroner ($8.04) each. There is no differential duty favoring cycle manufacturers in other countries.

German bicycles retail here for 220 to 320 kroner ($58.96 to $85.76); Norwegian bicycles, for 270 kroner ($72.36), 288 kroner ($77.18), and 315 kroner ($84.42). Bicycles put together in Christiania of parts manufactured in England sell for 342 kroner ($91.66). Canadian bicycles, with wood rims, mud guards, and other American improvements, are advertised and sold here as "American" wheels for 270 kroner ($72.36), 306 kroner ($82), and 315 kroner ($84.42). United States bicycles sell for 220 to 320 kroner ($58.96 to $85.76).

The general demand is for a strong, cheap wheel, and the high-grade machine would have but a very limited sale, when the population is considered.

Cycles are sold here usually by dealers in firearms and sporting goods.

Contrary to what appears to be the opinion of many, I think that—in this part of the world, at any rate—attractive and frequent circulars, catalogues, etc., would have considerable effect in introducing goods to the notice of dealers, where personal representation is impracticable, even when printed in English. Most of the leading retail dealers, owing to the large tourist traffic on this coast, speak English or have English-speaking clerks in their employ.

The following are the names of the principal dealers in cycles in Bergen: J. Milne Grieg, L. H. Hagen & Co., I. R. Tenden, Carl Bischoff, and W. Thomsen.

Catalogues, circulars, etc., should be, if feasible, prepared in Norwegian or Danish, although English would do fairly well if simple in construction and free from technicalities and local trade terms.

Merchants here are accustomed to purchasing on three months' time, and several dealers have told me that while they liked the American cycles and would be glad to handle them, they could not do so to advantage, as they are required to pay cash, while German and English manufacturers give three, or even four, months' time. The superiority of United States wheels, already recognized, may make it possible to offer a sufficiently liberal cash discount to offset the present established feeling among conservative merchants here as to time payments, especially if the relative prices of wheels should continue to change in favor of those of American manufacture.

ERNEST A. MAN,
Consul.

BERGEN, *April 20, 1898.*

GERMAN DUTY ON IMPORTED BICYCLES.

In reply to the frequent inquiries that are received at this office from American bicycle dealers and manufacturers, asking for an opinion as to when the pending increase in the German duty on imported bicycles is likely to be imposed, the following is submitted as a concise statement of what is at present known on the subject or conjectured upon what is thought to be the best authority.

When the present German tariff law was enacted, the bicycle had not become an important article of commerce, and it is not, therefore, specifically mentioned in the schedule. It is classified by the customs authorities under the category "fine ironware," the rate of duty on which is 24 marks ($5.71) per 100 kilograms (220.46 pounds), so that the import duty on an American-made cycle weighing 22 to 26 pounds is only from 75 cents to $1, a very low rate indeed.

When it is considered that under these favorable conditions the importation and sale of American-made wheels has reached large proportions in Germany, and the United States import duty on all foreign-made cycles is 35 per cent ad valorem, it is not strange that the German cycle manufacturers should clamor for increased protection from foreign competition. This, although every intelligent cycle maker knows that, even without any inequalities in duty, nothing produced in Europe could compete in the United States with home-made wheels. They have, therefore, as has been stated in a former report of this series, petitioned the Government to classify bicycles by an administrative decision as "vehicles," which would subject them under the present law to a practically prohibitive duty.

This petition having been brought by an influential committee before the Imperial Finance Minister and Secretary of the Treasury, they are understood to have considered the matter at length and decided that, while the proposed change of classification could not be granted, an increase of duty might and would be authorized. According to the Berliner Tageblatt, which is confident of the correctness of its information, this increase will be from the present rate to 20 marks ($4.76) on each bicycle, a rate that, it is thought, will afford the highly prosperous German cycle manufacture sufficient protection for practical purposes. The same authority, which is near to the sources of power, and therefore likely to be well informed, predicts that this increased rate will go into effect at the beginning of January, 1899, so as to meet the importations of bicycles for the trade of next year. This is probable, but nothing is positively known.

It may be added that the better class of bicycle dealers in this country, who handle the really high-grade American wheels, are not strenuously opposed to such an increase of duty. A good American-made cycle will easily stand a duty of 20 marks, which, on the other hand, would operate to exclude the flood of cheap, inferior, left-over, and bankrupt stocks that have been poured into this country during the past year and which have done more or less to break down and degrade the fine reputation the high-grade makes had estabtablished for American bicycles in Germany.

FRANK H. MASON,
Consul-General.

FRANKFORT, *May 11, 1898.*

GERMAN RESTRICTIONS ON UNITED STATES FRUIT.*

Referring to former reports on the imperial decree against the importation of American fruits into Germany, I have the honor to report the receipt of a note and inclosure from the Foreign Office, translations of which are herewith inclosed, from which it will appear that the Imperial Chancellor, by virtue of the power conferred upon him in section 2 of the above decree, has, in accordance with the opinion of experts, divided live plants into three groups—(A) those absolutely prohibited, (B) those admitted unconditionally, and (C) those admitted upon being found free from the San José scale after examination.

AND. D. WHITE,
Ambassador.

BERLIN, *April 24, 1898.*

NOTE VERBALE.

The Foreign Office has the honor to inform the embassy of the United States of America that the Imperial Chancellor (Imperial Department of the Interior) has, by virtue of section 2 of the imperial decree of February 5 last, by which he is authorized to make exceptions to the prohibition of importing live plants or fresh waste of plants (Pflanzenabfälle) from America, placed the question before experts, for them to ascertain whether certain categories of plants on which the San José scale is not to be found, or only in a degree not to be considered dangerous, are to be excluded generally from the prohibition of importation, or after an examination has taken place.

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* See CONSULAR REPORTS No. 210 (March, 1898), p. 377.

The investigation has led to the drawing up of the inclosed list, according to which the plants are divided into three groups, namely:

(1) Plants which must under all conditions be excluded from importation (A).

(2) Plants which may be imported because they are regarded as not being dangerous without any previous examination having taken place (B).

(3) Plants which may be imported after an examination has demonstrated the nonexistence of the San José scale (C).

As a result of this examination, the Imperial Chancellor (Imperial Department of the Interior) has decided to permit the importation of plants mentioned under 2 unconditionally, and those plants mentioned under 3 whenever the experts, after examination, have found them free from the San José scale. The exceptional privileges, however, apply exclusively to plants belonging to one of the two groups (B and C). Shipments consisting of plants of different groups will be treated in accordance with the regulations which apply to the group undergoing the more rigid examination. Only such experts may be entrusted with examinations who have been thoroughly instructed in the microscopical characteristics of the San José scale.

The Government of the Confederated States has been requested by the Imperial Chancellor (Imperial Department of the Interior) to furnish the frontier customs offices with appropriate instructions.

BERLIN, *April 19, 1898.*

A.—The following are to be unconditionally excluded: Living trees and bushes of all kinds, also parts of such (cut branches and the like); further, seedlings, scions,[*] shoots,[†] cuttings and the like of said categories of plants. The following especially come into consideration: Fruit trees and fruit bushes of all kinds, as apple, pear, quince, cherry, plum, apricot, peach, almond, walnut, pecan nut, (*Carya oliræformis*), date plum[‡] (*Diospyros virginiana*), Kaki plum, (Kaki pflaume), Kaki figs or Chinese persimmons (*Diospyros Kaki*); further, useful and ornamental trees and bushes or shrubs (Stäucher) of all kinds, especially linden trees, elms, alders, willows, acacia (Akazien), osage orange[§] and coniferous trees; further (bushes of) raspberries, blackberries, currants, gooseberries, and related growths, grapevines of all kinds, *Euonymus*, white thorn,[‖] Hagedorn,[¶] roses, spiräen (*Spiræa ulmaria*), Cotoneaster (dwarfmedler, *Pyrus chamæmespilus*), Japanese quince (*Cydonia japonica*).

B.—Importation is unconditionally permitted of aquatic plants of all kinds and parts of such; further, of all subsurface-growing parts of plants, as, for instance, onion bulbs, and subsurface-growing stems (Rhizomes), also when these bear developed stalks (Triebe), provided that they do not belong to plants of the species included under A.

C.—The importation of living land plants and parts thereof, as well as of seedlings, shoots, and the like, which do not belong to group A is permitted when an expert examination gives satisfactory results.

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[*] Ableger—scions, or slips.

[†] Setzlinge—shoots, plants, or young trees.

[‡] Persimmon.

[§] The original reads Färber-Maulbeerbaum (*Maclura aurantiaca*); Färberbaum is Venus sumach; Mulbeerbaum is mulberry tree; but *Maclura aurantiaca* is the osage orange.

[‖] Common hawthorn, may (*Cratægus oxyacantha*), "der glänzende Weissdorn"—cockspur thorn—*Mespilus crus galli.*

[¶] Also hawthorn, white thorn, quick-may (*Cratægus oxycantha*).

REMOVAL OF DUTY ON WHEAT IN FRANCE.

The French Government has temporarily removed the tariff duties on wheat for the period from May 4 to June 30, both days inclusive. The duty heretofore collected was 7 francs ($1.35) for 100 kilograms (220.46 pounds). Immediately after the expiration of this period—that is, from and after July 1—the full rate of 7 francs will be collected.

I inclose herewith the official text, together with a translation into English, of the decree signed by the President of the French Republic and published in the Journal Officiel under date of this day.

E. P. MacLean,
Vice-Consul-General.

Paris, *May 4, 1898.*

[Translation.]

The President of the French Republic, considering article 1 of the law of March 29, 1897; considering articles 1 and 14 of the law of January 11, 1892; considering article 1 of the law of February 27, 1894; the council of the ministers having been heard, decrees:

Article 1. From and after May 4, 1898, including that day, until July 1, 1898, excluding that day, the import duty on wheat in the grain, mentioned in Table A of the import tariff of the general customs tariff, is removed.

Art. 2. At the expiration of this period, the duty of 7 francs, as provided for by the law of February 27, 1894, shall be collected in full.

Art. 3. The President of the Council, Minister of Agriculture, and the Minister of Commerce are charged, each as to that which concerns him, with the execution of the present decree.

Done at Paris, May 3, 1898.

Felix Faure.

By the President of the Republic:
The President of the Council, Minister of Agriculture,
Jules Méline.
The Minister of Commerce, of Industry, of Posts, and of Telegraphs,
Henry Boucher.

REDUCTION OF WHARFAGE DUES IN FRANCE.

In order to encourage and increase the external commerce of France, a law went into effect on December 31 last which considerably reduced the wharfage dues (droits de quai) to be paid by vessels of all nationalities entering and clearing from the ports of France and her possessions. Information concerning this law was embodied in my report of January 5 last, published in Consular Reports No. 210.

Upon a practical application of the law it was found that, instead of entirely ameliorating the condition of affairs, it actually increased the dues to be paid by vessels engaged almost exclusively in the passenger trade and carrying but little freight.

As it was not the intention of the framers of the act to discriminate against any class of vessel, a new law has been passed, bearing date of March 23, 1898, which is supplemental to the act of December 31, 1897, and is designed to extend the advantages of a reduction of wharfage dues to those vessels unfavorably affected by the previous law.

The new law went into effect on March 27, 1898. Its text is as follows:

> ARTICLE I. The amount of wharfage dues (droits de quai) to be collected by virtue of the law of December 23, 1897, from vessels engaged in the passenger trade, can not exceed in the same voyage, even if there should be several calls, 1 franc (19.3 cents) per passenger, 2 francs (38.6 cents) per horse or head of large cattle, 8 francs (57.9 cents) per each two-wheeled carriage, 4 francs (77.2 cents) per each four-wheeled carriage, and 1 franc (19.3 cents) per ton of merchandise which the vessel may have on board upon its entering French waters; provided that the total weight of merchandise, expressed in tons of 1,000 kilograms (2,200 pounds) does not exceed one-twentieth of the net tonnage of the vessel.
>
> These wharfage dues will be reduced one-half for vessels engaged exclusively in the international coasting trade.

In order to illustrate the reduction provided for by the new act, I give the following example:

A vessel of 400 tons net, plying between Southampton and Havre (international coasting trade), enters the last-named port with 19 tons of freight and 100 passengers, which are disembarked. She also embarks 100 passengers. According to the law of December 31, 1897, her wharfage dues would be as follows:

	Tons.
Net tonnage	400
Freight	19
Passengers disembarked (each passenger disembarked counting as 1 ton of freight)	100
Passengers embarked (each passenger embarked counting as 1 ton of freight)	100
Total	219

which, being greater than one-half of the net tonnage of the vessel, and it being in the international coasting trade, the dues would be 9.65 cents per total net tonnage of the vessel, that is, $38.60.

NEW LAW.

	Tons.
Net tonnage	400
Freight	19
Passengers	100
Total	119

This at 9.65 cents per ton equals $11.48. Difference, $27.12.

The 19 tons being less than one-twentieth of the total net tonnage, and the vessel being engaged in the international coasting trade, the dues would be calculated as above.

According to the law of December 31, 1897, the operations of discharging and loading freight and disembarking and embarking passengers were included in calculating the tonnage. In the new law, however, only the actual amount of freight and the number of passengers on board at the first entry in French waters are taken into consideration.

There being a difference of opinion between the ship brokers and the custom-house officials as to the proper interpretation of the new law, the director-general of customs at Paris has issued the following circular explaining its workings, for the guidance of those interested:

CIRCULAR OF MARCH 28, 1898.—NO. 2894.

A law dated the 23d of March, 1898, and inserted in the Journal Officiel of the 25th of the same month serves to complete article 4 of the law dated December 23, 1897, relative to the wharfage dues payable by vessels engaged in the passenger trade.

As provided for by article 7 of the financial law of July 29, 1881, vessels of this category shall pay wharfage dues according to the number of passengers, horses, cattle, carriages, and the quantity of merchandise on board upon entering a French port, provided that the total weight of the merchandise, expressed in tons of 1,000 kilograms (2,200 pounds) does not exceed one-twentieth of the net tonnage of the vessel.

The Government directs the attention of its customs officials to the particular mode of taxation established by the law of March 23, 1898. By virtue of the regulations at present in vogue at Algerian ports, vessels coming within the requirements specified above shall pay no wharfage dues or tax upon the taking on of passengers and freight. But, contrary to the ruling of the law of December 23, 1897, that of the 23d of March, 1898, taxes not only passengers and merchandise debarked at a French port, but also the passengers and merchandise remaining on board while the vessel lies at her dock.

The taxes or dues to be collected under this ruling are fixed as follows: Nineteen and three-tenths cents per passenger, 38.6 cents per horse or head of large cattle, 57.9 cents per two-wheeled carriage, 77.2 cents per four-wheeled carriage, and 19.3 cents per ton of merchandise. Sheep, pigs, and animals of smaller species shall pay 19.3 cents for every four head.

These taxes shall be reduced one-half for vessels engaged exclusively in, and coming within the limits of, the international coasting trade.

Under the present law a vessel touching at several ports shall pay taxes on all passengers, merchandise, etc., at the custom-house of the first port only; and the receipt given at this port shall be sufficient in itself to exempt the ship from paying further dues and to permit free entry elsewhere.

It is further provided that captains or owners of vessels are accorded the right to decide under which ruling they wish to enter their ships; that is, to say under the statute of December 23, 1897, or of March 23, 1898.

In any case, the tax applicable to vessels engaged in the passenger trade must not exceed the maximum tax of 19.3 cents per net ton for vessels in general and 9.6 cents per net ton for those coming within the limits of the international coasting trade.

Collectors of customs are instructed to bring the present ruling to the notice of customs officials and to all others whom it may concern.

BOUSQUET,
Director-General.
ROUSSEL,
Administrator.

A. M. THACKARA,
Consul.

HAVRE, *April 21, 1898.*

CATTLE TRADE OF ANTWERP.

The following is a translation of an article taken from the Matin, of Antwerp, concerning the importation of cattle at this port:

The chamber of commerce has just addressed a very important letter on this subject to the Minister of Agriculture and Public Works, protesting strongly against the protectionist tendencies of the Government, which have caused much injury to Belgian commerce, and are likely to cause more, for Belgium will fail to obtain any concession in the negotiations with Canada and the United States, as was shown at the time of the termination of the Anglo-Belgian treaty of commerce. Canada will no doubt refuse to grant us the preferential rate of duty, and the President of the United States will refuse us the benefit of concessions upon the prohibitory rates of the tariff introduced in 1897.

It is to be remarked that there has been created since 1890 a new branch of trade between Canada, South America, and our country, namely, the importation of live cattle; which traffic has taken sufficient proportions to enable Antwerp to become the principal cattle and meat market of the Continent.

The agrarians were not satisfied with the then existing protective rates of duty, and the Government, resorting to pretexts which the chamber of commerce and ourselves had already shown to be unreasonable, granted them the exclusion of trans-Atlantic cattle. The direct consequence was seen in the arrival and departure of vessels, in the rates of freight, in our import trade, as a factor in our general commerce, and in the necessity of paying higher prices for beef and mutton than one pays in England.

The chamber of commerce recalls attention to these disastrous consequences, and adds that the prohibitory measures have had, on the other hand, a reactionary effect in our intercourse with the countries hereinafter named.

If the general interests of the port of Antwerp, of its commerce, those of the consumers of meat, have been and remain ignored, notwithstanding just protest, how much more serious are the consequences for our export trade by the application of the present tariff of the United States, Canada, and the Argentine Republic? What will be the consequence when in the near future these three countries apply to England and other manufacturing countries either a general preferential rate of 25 per cent, as in the case of Canada, or perhaps a reduction of duty on glass, iron, sugar, and other manufacturing products, which form the great bulk of our exports?

The statistics for the year 1897 show, in our export of glass to the United States a reduction of 400,000 francs ($77,200) in mirrors and a falling off of 6,000,000 kilograms (13,227,600 pounds) in window glass.

In 1897, the importation of cattle was considerably reduced; trans-Atlantic importation of horned cattle has entirely ceased, while that of sheep from the Argentine Republic, after falling off from 47,778 head in 1896 to 19,988 head, has ceased completely, for the reason that, although the agrarians have not demanded entire exclusion of sheep, the importation is only possible in connection with that of cattle. If the cargo of a vessel is not made up of the cattle and sheep combined, the rate of freight per head of sheep becomes excessive, and the result per se is exclusion.

The plea brought forward that, for hygienic reasons, severe administrative measures were necessary, was absolutely false. It has been demonstrated, without a possibility of being contradicted, that cattle in North as well as in South America were free from disease, and that no epidemic among cattle existed in either of these countries. Belgians have been deprived of the means of furnishing themselves with healthy meat at a low price, but horses from England (and what horses!) are daily received, destined to be used as food by the lower classes.

This deplorable state of affairs, in connection with the fatal influences it may exert upon our negotiations with the United States and Canada, urgently demands the immediate intervention of our Government.

GEO. F. LINCOLN,
Consul.

ANTWERP, *April 25, 1898.*

WATER SUPPLY FROM SAND DUNES IN THE NETHERLANDS.

Under date of April 18, 1898, Consul G. J. Corey, of Amsterdam, transmits memoranda regarding the water supply of that city, as collected from the sand dunes bordering the sea.

The dunes consist of sand blown up from the seashore. Their basis consists of sand, also, although this is mixed with peat at some points, and at the sea level layers of compressed peat are frequently found. It is noticeable that these peat layers are never found on the sides of the dunes next the sea.

The rainfall in the dunes percolates through the sand and flows landward and seaward. The surface is therefore a cone whose apex is the summit of the dune, which, sloping both ways, forms a continuous watershed. In the dunes near Haarlem, where they have a width of about 4 kilometers (nearly 2½ miles), the summits are 20 to 23 feet above sea level.

Not only is the dune water fresh above sea level, but it is perfectly fresh to a depth of 20 meters (66.6 feet) below sea level. This fresh water being found at such depth under the dunes, while the water at the same depth, in the immediate neighborhood, is salt, goes to prove that either the subsoil must be based on fresh water, the hydraulic pressure of the dune water preventing sea impregnation, or that the water, originally salt, has become freshened by this dune-water pressure. In any case, this dune water is a vast reservoir of fresh water.

The quantity of rain water percolating through these dunes, and contributing to the ground-water streams, is estimated at 0.30 meter (1.191 inches) per annum. From a range of dunes 2½ miles in width the quantity of water thus percolating is estimated at 240,000,000 gallons per kilometer (0.62137 mile) in length of dunes. This quantity, however, can not be drawn off, as a certain amount must be permitted to flow inward and outward to counteract the pressure of the salt water from the sea and the land.

For the Amsterdam waterworks the water is collected in open canals, which are never excavated below sea level. For The Hague waterworks it is collected in stoneware pipes, in a bed of shells, laid at a depth of 13 feet below sea level. In Haarlem, on the other hand, the water will be collected in wells of 50 to 66 feet below sea level (these works are not yet completed).

The water contains much iron in solution, and for this reason, as well as for other reasons, it is filtered at the three places mentioned before being pumped into the mains. When the water is collected in wells or in pipes, it must be aërated before being filtered.

The question of securing a permanent supply of fresh water from below sea level is not, it appears to me, infallibly settled. Cases which have come within my personal cognizance would seem to cast a doubt upon this low supply. I have known wells 10 to 40 meters (32.8 feet to 131.2 feet) to supply perfectly fresh water for a time; but after a certain period of pumping, the water became so salt as to render it unfit for use. Whether these cases are exceptions, remains to be proven by time, the deep drainage system having been in operation only a comparatively short period.

LEIPSIC COMMERCIAL HIGH SCHOOL.*

The merchants of this country for some time past have recognized the value and necessity of giving young men who intend to follow the commercial industries information in connection therewith. The business men of this city, under the auspices of the Leipsic Chamber of Commerce, with the advice and consent of the Royal Ministry of the Interior and the academical senate of the University of Leipsic, will open on the 23d of April, 1898, a commercial high school, the first of its kind in Germany. There are, of course, many expenses in connection with the establishment of this institution, which will be paid by the Leipsic Chamber of Commerce. The Royal Ministry of the Interior and the council of the city of Leipsic have, however, promised to contribute something toward defraying the running expenses for the first two years at least.

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*See CONSULAR REPORTS No. 212 (May, 1898), p. 103.

The establishment of such schools will be found to be most beneficial to commercial careers, and their methods and teachings can not fail to impress upon the minds of the students the great value of these institutions as a means for increasing one's business knowledge, and also for the perpetuation and upbuilding of a country's commerce and industries.

This subject is well worthy of thoughtful and careful consideration, not only by our boards of education, but by the boards of trade of our large cities.

The following is a brief plan of the Leipsic Commercial High School:

The management is placed in the hands of twelve men, who are chosen to serve for a period of two years. This body is called the commercial high school senate, and is composed of one representative of the Royal Government, one of the city of Leipsic, the president and two members of the Leipsic Chamber of Commerce, three professors of the University of Leipsic who are appointed by the academical senate thereof, two professors of the commercial high school, appointed by the president thereof, and the director of studies. The president of the chamber of commerce is chairman of the commercial high school until further notice.

The director of studies is appointed by the commercial high school senate for a period of two years. His duties are chiefly confined to the supervision of the daily school work. He is required, before the beginning of every school term, to communicate with the different professors whose lectures are included in the term's work to remedy any conflict that may appear in the working schedule.

Admission is granted to students who can give a certificate setting forth that they have attended German schools for nine years, to teachers who have passed their second examination, to merchants who have their one year's voluntary military service papers, or who have finished their apprenticeship, if they can show in a satisfactory way to the board the necessary mental knowledge. In case foreigners ask for admission, the committee will decide whether or not they possess the proper educational qualifications. No person can be a student at the commercial high school and at the University of Leipsic at the same time; upon application for a visiting card, however, permission will be granted students of either institution to attend lectures in the other.

The course of study covers the science of law and political economy (as far as they are necessary and valuable for general education and for the commercial profession), commercial history, commercial geography, knowledge of goods, technology, and foreign languages. Commercial arithmetic, bookkeeping, correspondence, and stenography will also be taught. Those who desire to educate themselves as commercial-school teachers will have an opportunity of attending pedagogical lectures at the seminarium, which is connected with the public commercial school.

The school term begins on the 23d of April and lasts until the end of July. The second term commences the 1st of October and finishes on the 1st of March. Just before the second term—*i. e.*, the last week in September—the time is spent in visiting factories and mills to study the actual workings thereof.

Two years' time is required for the whole course.

The tuition fee is $10 per annum, which entitles the student to attend all the lectures of the course. For subjects other than prescribed in the regular course, such as foreign languages, an additional fee will be charged, which, however, will be very small.

The establishment of a State examination commission and the publication of detailed regulations concerning the examinations is reserved. Misconduct is punishable by fines as high as 50 marks ($11.90), and, in case of gross misconduct, by dismissal.

The following will be the faculty for the first two years:

Science of general political economy, Prof. Dr. Büchner; commercial and trade politics, Prof. Dr. Büchner; industrial politics, Dr. Pohle; commercial, maritime, and banking laws, Prof. Dr. Friedberg; introduction into the studies of statistics, Prof. Hasse; German colonial politics, Prof. Hasse; geography and colonial politics of East German Africa, Dr. Hassert; general and chemical technology, Dr. Rassaw; elementary insurance mathematics, with practical exercises, Dr. Hausdorff; countries and cities of central Europe, Prof. Dr. Ratzel; general history of modern times, Prof. Dr. Marks; introduction into the knowledge of plastic arts, Prof. Dr. Schmarsow; history of the German literature of the generation of Klopstock and Lessing, Prof. Witkowsky; commercial and political arithmetic, Mr. Lambert; bookkeeping, Mr. Lambert; correspondence and office work, Dr. Döll; mechanical technology, textile industry with excursions, Dr. Pritzch.

Lectures in foreign languages and exercises in commercial correspondence in foreign languages will be arranged as they may be needed.

B. H. WARNER, Jr.,
Consul.

LEIPSIC, *March 25, 1898.*

TRADE-MARKS IN HUNGARY.

I inclose translation of the rules concerning the registration of trade-marks now in force in Hungary, a request for information on the subject having been received from a firm in Massachusetts.

By the ten years' "commercial compact" with Austria concluded in 1887, renewed by a "provisorium" for the year 1898, trade-marks registered in Hungary are protected in Austria. But by the inclosed rules and by the convention with the United States concluded in 1871, registration must take place in both countries.

The movement in Hungary against the renewal of the "commercial compact" for the full term 1897–1907 is attracting much attention at present.

FRANK DYER CHESTER,
Consul.

BUDAPEST, *April 14, 1898.*

BUDAPEST CHAMBER OF COMMERCE AND INDUSTRY.

INSTRUCTIONS PRESCRIBING THE METHOD TO BE FOLLOWED IN THE REGULATION OF TRADE-MARKS AND THE RENEWAL OF REGISTRATIONS.

(On the basis of Law II of 1890, and Law XLI of 1895, and of Executive Ordinance No. 25552 issued under date of April 30, 1890, by the Royal Hungarian Minister of Commerce.)

I. Parties may apply for the registration, renewal, transfer, or repeal of trade-marks at the trade-mark registration bureau, either in writing or in person.

In the former case, the petition must bear a 50-kroner revenue stamp, and in addition each and every trade-mark must be accompanied by two 15-kroner stamps; in the latter case a 50-kroner stamp for the taking of the protocol is also required.

II. The following documents and data must be produced at the first registration of any trade-mark:

(1) A certificate as to the occupation of the petitioner (license, firm-registration decree, or tax receipt).

(2) The name of the article to be protected by the trade-mark.

(3) Five copies of the original trade-mark.

(4) The stereotype of the trade-mark, which must be just 25 millimeters (0.985 inches) high and not more than 20 centimeters (7.87 inches) long and 13 centimeters (5.12 inches) wide. (Only stereotypes with square base are accepted. Round or oval-shaped stereotypes are unsuitable).

(5) A fee of 5 florins ($2.01) for the registration of trade-mark.

(6) In case of stamps, etc., directly placed on metal, glass, and such materials, three specimens of the same. (Each of these specimens must have an eyelet, so that the mark given in the register can be attached by a string. The specimen must show the picture of the trade-mark in its natural size, and must be so designed as to leave around the picture a margin of only 2 centimeters=0.79 inch).

(7) In case of trade-marks containing the liknesses of their Majesties or of members of the royal family, or decorations (including exhibition medals), or the coat of arms of the country or of any public authority, a certificate of the right of using the same.

III. The following trade-marks are exempt from registration:

(1) Those containing merely the likenesses of their Majesties or of some member of the royal family.

(2) Those consisting only of the coat of arms of the Government or of public offices, or numbers, or letters.

(3) Those in general use in trade for marking the same goods.

(4) Those containing representations that are immoral, offensive, or contrary to the public order, or marks of any kind which do not answer the real purposes of the business, or are not genuine, and would mislead the public using the articles so marked.

IV. If the registration of a trade-mark is refused, the party will receive a written notice to that effect, against which, through the channel of the chamber of commerce, he may appeal within thirty days to the Ministry of Commerce.

V. In accordance with section 16 of the trade-mark law, the registration of trade-marks must be renewed every ten years from the date of the first registration.

At the time of renewal, the original certificate of registration must be produced to the registration bureau. In case it is impracticable to produce the same, the date and number of the original registration must be given.

At the renewal, however, the stamp taxes mentioned in Section I have to be paid, and all the formalities mentioned in Sections I and VII must be observed.

VI. The above instructions apply to owners of foreign trade-marks, with the addition that they are obliged to register their trade-mark both at the Budapest and at the Vienna chambers of commerce.

They are further obliged to prove, by a certificate of registration or a legalized copy of the same, that their trade-mark is registered in their own country.

In order that this registration may be quickly and promptly effected, and that no time may be lost in correspondence, it is desirable that foreigners should appoint a local representative to attend to the registration.

TRADE ROUTES IN PERSIA.

I inclose a report on the trade routes connecting Persia with the outer world, taken from the British Board of Trade Journal.

The trade routes which connect Persia with the outer world may be roughly classified into northern, northwestern, and northeastern routes, which are more or less monopolized by Russia, and the southern and southwestern, used by England and by British India. The purely Russian lines are those from Tiflis, in the Caucasus, and from Astara, a small port on the southern shore of the Caspian, to Tabriz, and thence via Kasvin to the capital; the caravan routes from Enzeli, Resht, and Meshed-i-sar, on the Caspian, direct to Teheran; the route from Gez, on the southeastern shore of the Caspian, via Asterabad, and the still more important one from Askabad, on the trans-Caspian line, of which the two last named lead direct to Meshed, the capital of the rich Persian province of Khorassan.

But, although Russia may predominate in the north, the bulk of the foreign trade of Persia is carried on in the south via the ports of the Persian Gulf, and here the British trader is in the ascendant.

These ports are Bunder-Abbas, at the entrance to the gulf, whence caravans ply via Kerman and Yezd to Ispahan and even strike off in a northeasterly direction to Meshed-Lingah, the port of the Persian province of Larista-Bushire which trades with Teheran via Shiraz and Ispahan, and Mohammerah for Shustar and Ispahan, and thence to the capital.

The trade of western and northwestern Persia is also carried on by a line of steamers up the Persian Gulf to the Turkish port of Busrah (Bassorah), there being transshipped to river steamers on the Tigris for carriage to Bagdad, whence goods are conveyed across the Turko-Persian frontier at Khanikin, and eventually reach Teheran via Kermanshah and Hamadan. The other transit routes through Asiatic Turkey are from the port of Alexandretta, on the shores of the Levant, via Aleppo, Mosul, and Tabriz, and from Trebizond, on the Black Sea, via Erzerum to Tabriz. The commercial avenues to Persia may, therefore, be summarized as follows:

Through Russian territory.—Via Tiflis, Tabriz, and Kazvin to Teheran; via Afghanistan; via the southern Caspian ports; via the Trans-Caspian Railway and the Khanates.

Through British India.—Via Afghanistan and Beluchistan.

Direct from Persian Gulf ports.—Via Bunder-Abbas, Kerman, and Yezd; via Lingah and Laristan; via Bu[illegible]re, Shiraz, and Ispahan; via Mohammerah, Shustar, and Ispahan.

Through Turkish territory.—Via Busrah, Bagdad, and Khanikin; via Alexandretta, Aleppo, Mosul, and Tabriz; via Trebizond, Erzerum, and Tabriz.

LEO BERGHOLZ,
Consul.

ERZERUM, *April 15, 1898.*

SCARCITY OF PROVISIONS IN GUADELOUPE.

There is a scarcity here of flour and other provisions, and also of lumber, owing to the cessation of the arrivals of vessels from the United States. The last vessel arrived March 26 and cleared April 2. At that time there was a stock of less than 2,500 barrels of flour. The four largest grocers bought up all this flour from the commission merchants, and also all the beef, pork, beans, etc., paying an advance of from 8 to 10 per cent. For the first time, there is not an ounce of American provisions in the hands of the large importing houses here. The grocers have raised the price of flour from 50 francs to 60 francs ($9.65 to $11.58), and everything else in like or even greater proportion.

The prices hitherto have been in the paper money of the colony, which has been at 30 per cent discount. Yesterday the bank lowered the discount to 28 per cent, and the prices of provisions have correspondingly appreciated. Orders for provisions have been cabled; but there is great uncertainty whether such goods, even if purchased in New York on account and risk of French merchants, would be free from capture under a neutral flag.

Lumber has likewise advanced in price, the increase being from 15 to 20 per cent. Unless cargoes reach here at an early date, all provisions will be doubled in price, and there will be much suffering and misery.

The lowering of the rate of exchange of the paper money, while a step toward the material prosperity of the colony, will be of immediate detriment, as the prices will remain at the same high figure. There is practically a corner on United States provisions, and as but small amounts are produced here, these too have advanced in price.

The elections for deputies to the French Chamber will be held May 3, and the contest is very bitter. Should prices become so high that actual suffering occurs, serious results may follow. I can not say there is imminent danger, but there is great uneasiness.

LOUIS H. AYMÉ,
Consul.

GUADELOUPE, *April 27, 1898.*

Under date of May 6, 1898, Consul Aymé writes:

Referring to my report dated April 27, 1898, I have to state that some modification of the conditions of the food supply of this colony has occurred.

On May 1, the Norwegian steamer *Tjomo* arrived from New York, bringing 2,200 barrels of flour, 175 barrels of beef and pork, and 1,800 packages of other supplies. May 4 the steamer *Pretoria*, of the Quebec Line, arrived bringing 1,300 barrels of flour and 300 packages of other supplies. The present stock is, approximately, 4,800 barrels of flour. The monthly consumption is about 5,000 barrels. The excessively high prices have been temporarily lowered, but, unless further supplies are regularly sent, the conditions outlined in my last report are merely delayed.

SANTO DOMINGO (DOMINICAN REPUBLIC).*

The Statesman's Year Book, 1898, gives the area of the Dominican Republic as 18,045 English square miles, and the population as 610,000, according to the census of 1888. The capital, Santo Domingo, had, in 1892, 14,150 inhabitants.

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* **This descriptive matter will appear in the forthcoming edition of Commercial Relations, 1896–87.**

According to United States Treasury figures, the exports from the United States to Santo Domingo (Dominican Republic) in the fiscal year 1896–97 were $1,098,635, and the imports into the United States, $2,369,424. The exports showed a gain of about $30,000 over the previous year, but the imports were less by over $500,000. British official statistics include Haiti with the Dominican Republic in the statements of trade. The figures for 1896 are: Exports from Great Britain, $1,433,700; imports into Great Britain, $451,000.

The Annales du Commerce Extérieur, 1897, No. 12, Paris, gives the following table of exports from the Dominican Republic in 1895:

Articles.	Exports.	Articles.	Exports.
Sugar............pounds...	2,390,960,000	Skins............number...	17,206
Coffee............do......	4,106,000	Bananas............bunches...	67,255
Cacao............do......	8,762,000	Divi-divi............pounds...	2,606,000
Tobacco............do......	6,634,000	Logwood............tons...	17,358
Molasses............gallons...	621,492	Cedar............do......	115,325
Honey............do......	28,492	Mahogany............feet...	14,558
Wax............pounds...	321,495	Mahogany.....pieces (fourches)...	352,670
Orange peel............do......	80,000		

Consul Grimke, of Santo Domingo, in his annual report, dated July 16, 1897, says:

The trade relations between the Dominican Republic and the United States have been, during the year closed, as heretofore. The country is, however, suffering from general business depression, produced by many causes, such as high duties upon imports and exports, a depreciated and unstable paper and silver currency, and the decline in the price of sugar in the New York market, the production of sugar being the principal industry of the country.

SUGAR.

There are eighteen large sugar plantations in this consular district. All of the sugar produced, except what is actually consumed in the domestic market, is exported to New York. The aggregate value of this product exported during the year amounted to $2,463,906.62.

OTHER PRODUCTS.

Exportations of logwood, lignum-vitæ, mahogany, honey, wax, hides, and bananas are made chiefly to the United States, while those of coffee, cacao, and tobacco find a market almost wholly in France, Germany, Belgium, and England.

IMPORTS.

Lumber.—For building purposes, lumber is imported entirely from the United States. The aggregate quantity imported during the year in this consular district amounted to about 2,500,000 feet, which retails in this market at $37.50 gold per 1,000 feet.

Flour.—This article is imported entirely from the United States. Retail price per barrel, $12 gold.

Kerosene oil.—Refined kerosene oil has until recently come wholly from the United States, but the establishment of a local petroleum refinery at La Romana during the year will probably limit the importations of this article hereafter to the crude material, which will be imported exclusively from the United States. Retail price of refined kerosene oil here is $2.75 gold per 10 gallons.

Butter.—The best butter in cans imported here comes from Denmark, and retails in this market at 62½ cents gold per pound. The United States article is of inferior quality. It retails at 37½ cents per pound.

Cheese.—Cheese is imported from Holland and the United States. The Dutch cheese sells a few cents higher than the American. Dutch cheese costs per pound 25 cents gold; American cheese per pound, 22½ cents gold.

Miscellaneous.—Canned meats, vegetables, and milk come mostly from the United States; salt fish and pork, wholly; lard and cooking oils come from the United States, Spain, and Italy; confectionery, wholly from Spain; wines, mostly from France and Spain; rice, mostly from India, and lager beer from the United States and Germany, competing with the beer produced by a brewery established in this city by American capital. The price of the home beer er case is $2.25; German beer, $3; American beer, $3.50.

Plantation supplies.—Plantation supplies, such as sugar machinery, locomotives, cars, rails, iron bridges, etc., come largely from the United States. Germany is a strong competitor with us in these lines.

Hardware supplies.—Articles of the hardware trade are imported largely from the United States; but England, Germany, and Belgium are competing with us for this trade.

Coal.—Hard and soft coal are imported from the United States and England. Coal retails in this market at from $12 to $13 gold per ton.

Cotton goods.—Cotton goods are imported from England and the United States, but mostly from the former country. The American article, although of better quality, is not as cheap as its British rival; and cheapness gives to its possessor indisputable advantages in the struggle for the market of the world.

The retail price of cotton goods ranges, according to quality, from 7½ to 25 cents gold per yard.

Silk goods.—Silks come from France entirely, and retail per yard at from 75 cents to $3 gold.

Hats.—Straw and other hats for both sexes are imported from

France and England. Men's hats retail at from $2 to $6 gold each. Women's hats retail at from $7 to $12 gold each.

Shoes.—Men's and women's shoes are imported from the United States, France, Germany, and Spain, and retail per pair at from 37½ cents to $5.

Electrical machinery and supplies.—This city and several of the sugar plantations are lighted by electricity. All of the machinery and annual supplies for these plants are imported from the United States.

Bicycles.—Bicycles are imported from the United States and France; largely from the United States. The importation into this consular district amounted to about 100 during the year.

Packing.—The methods used in the United States are severely criticised by the merchants and planters, and the bags are said to be of inferior quality.

WAGES.

Agricultural laborers are paid, per day, 50 to 75 cents; day laborers in city, per day, 50 cents to $2; domestic servants, including board, per month, $3 to $12; clerks, per month, $15 to $75.

SHIPPING.

The aggregate number of vessels engaged in foreign trade which entered the ports of this consular district during the year was 344, with an aggregate tonnage of 364,609.81. Of this number, 142 were from the United States, with a total tonnage of 183,130.24.

UNITED STATES INTERESTS.

American interests are relatively very large. About half of the sugar plantations are American, in capital at least, and all of them draw their annual supplies from the United States.

An American corporation, viz, the San Domingo Improvement Company, collects the revenues of the country. The National Bank is controlled by the same company.

William P. Clyde & Co. run, under concession, a fortnightly line of steamers between the ports of the country and New York. A brewery and an ice factory in this city are built by American capital and operated under American management.

BUSINESS OUTLOOK.

The commercial and financial outlook of the country is very gloomy. Much depends upon what is to be the fate of its sugar industry, which appears to be threatened, owing to the low price of sugar in the New York market, the high export duty which this article pays, and which amounts to about 25 cents per quintal, and to other causes. Many estates are reported to be at present on the verge of bankruptcy and ruin.

The currency of the country consists of the depreciated paper of the National Bank and of Dominican silver money. The new Dominican silver dollar is so much cheaper than the Mexican dollar that this last has been driven out of the country.

Exchange to-day is quoted at 127 per cent, and promises to rise still higher. It is, in fact, quite impossible at present to buy drafts at even that high rate.

Under date of July 28, 1897, Consul Grimke writes:

I have to inform the Department of the completion of a railroad about 45 miles long, between Puerto Plata, on the north coast, and Santiago, in the interior of the Dominican Republic. Although the distance covered by the road is comparatively unimportant when compared with the great railway lines of the United States, it is by no means insignificant for this country. Its construction has been the work of years, and the line, short as it is, crosses two mountain ranges. American and European capital is embarked in the enterprise, and the road is operated by the San Domingo Improvement Company, an American corporation. Since 1892, Edward Hall, an American engineer, has directed the work of construction. The materials for building and operating the road have come largely from Europe, although a portion, such as bridges and some of the rolling stock, has been imported from the United States. Messrs. Drake & Stratton, American contractors, were awarded the contract for constructing part of the line. I am informed that it is well equipped with rolling stock, and will run three trains a day between Puerto Plata and Santiago. The country through which the line passes comprises some of the richest coffee and cacao lands of the island. The object is to connect the fertile valley of Santiago with a seaport. This valley produces for export coffee, cacao, tobacco, beeswax, hides, lignum-vitæ, mahogany, satinwood, logwood, etc. In the Dominican Republic, there is but one other railroad for public use, viz, the Samana and Santiago Railroad, which has been in operation since about the year 1887 and runs from Samana to La Vega, in the valley of Santiago, a distance of 60 miles. It was built and is owned and operated by Scotch capital.

Speaking of agricultural conditions, the Recueil Consulaire, Brussels, 1896, Vol. XCII, says:

> Not only is there a constant increase in production, but the quality of the products shows steady improvement. Sugar, coffee, cacao, tobacco, mahogany, cedar, and divi-divi are the chief articles of export. Capital is being largely invested, especially in the regions traversed by the Central Railroad. The Government grants all possible franchises and advantages. The movement of immigration,

which has been marked since the war in Cuba, is encouraged in every way. Subsidies are accorded the immigrants, the acquisition of land is made easy for them, and other inducements for permanent residence are offered. The majority of the arrivals belong to the agricultural class, and are accustomed to work in the plantations.

In a report printed in CONSULAR REPORTS No. 201 (June, 1897), Consul Grimke says that preparations are being made to cultivate bananas extensively; 60,000 trees have been set out on a plantation about 60 miles from Santo Domingo, and 400,000 more are to be planted this year. The supplies have been obtained from the United States, one of the concessionaries being an American citizen. An exclusive right to establish a petroleum refinery is included in the concession, and the company will practically have the monopoly of the sale of refined kerosene oil in the Republic.

TARIFF INCREASE.

In a supplement to his annual report, Consul Grimke notes that in August, 1897, a new tariff tax of 3 per cent on the total customs receipts was enacted, the same to be collected on the import and export duties. Under date of March 28, 1898,* Mr. Grimke reports that on the 1st of April, 1898, a new law increasing all customs duties 10 per cent went into effect.

TREATY OF PEACE BETWEEN COSTA RICA AND NICARAGUA.

The Department has received the following note, with inclosures, from the legation of Costa Rica, dated Washington, May 14, 1898:

Mr. Calvo to Mr. Day.

SIR: In consideration of the spontaneous and generous offer of the good offices of the Government of the United States to the Government of Costa Rica, on occasion of recent difficulties, happily terminated, with Nicaragua, I have the honor to inclose herewith, for Your Excellency's information, copy and translation of the treaty of peace between the two countries, signed on board the United States war ship *Alert*, April 26, 1898.

I also inclose translation of an editorial of La Gaceta, the official organ of San José, Costa Rica, in which public expression of gratitude is made to the Government of the United States and its worthy representative, for kind and efficacious cooperation in favor of a peaceful termination of the difficulties mentioned.

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* See CONSULAR REPORTS No. 213 (June, 1898), p. 311.

Upon communicating to Your Excellency the aforesaid documents, it affords me great pleasure to confirm the expression of the sentiments stated therein toward the Government of the United States and its representative in Costa Rica.

Be pleased, etc.,

J. B. CALVO.

EDITORIAL FROM LA GACETA, SAN JOSÉ, MAY 1, 1898.

We insert in this number of the official daily the convention of peace between Costa Rica and Nicaragua, concluded on board the *Alert*, a war ship of the Navy of the United States of America, at 4 p. m., April 26 last.

The articles of that instrument, based upon a perfectly equal footing for the two countries, and inspired by sentiments of Central American fraternity and concord which the worthy mediator representing the friendly Government of Guatemala has so ably known how to arouse, need no comment to make them thoroughly understood.

Strongly grasping the staff of his generous intentions, gaining courage from the enthusiasm which everything connected with the welfare of Central America inspires in him, that distinguished Central American succeeded, after assiduous and persevering efforts, in marking out the path of conciliation for these nations—a work doubly meritorious by reason of the immediate benefit they receive and of the transcendent influence of the step on the future life of Central America, which will find herein an efficacious and favorable precedent for the maintenance of peace among all the States.

Upon again expressing the national gratitude to the Government of Guatemala and its worthy representatives, we are glad to voice the same sentiments to the Government of the United States of America and its worthy representative, whose good offices were also opportunely offered and accepted.

In commemoration of peace, and at the suggestion of the Most Excellent Diet of the Greater Republic of Central America, the national colors will to-day remain hoisted on all public buildings, and the regulation salutes will be fired, all of which is at one and the same time a proof of the Central American rejoicing at the securement of independence sealed by the capitulation of Walker forty-one years ago to-day.

TREATY OF PEACE BETWEEN COSTA RICA AND NICARAGUA.

[From La Gaceta, official organ, San José, Costa Rica, May 1, 1898.]

In neutral waters of the Pacific Ocean, on board the United States war ship *Alert*, generously offered for the purpose by His Excellency William L. Merry, minister plenipotentiary of the United States, near the Government of the Republic of Costa Rica, being off Cabo Blanco, 9° 26′ 45″ latitude north and 85° 3′ 30″ longitude west, the undersigned, Ricardo Pacheco, plenipotentiary of the Republic of Costa Rica; Manuel Coronel Matús, plenipotentiary of the Greater Republic of Central America, and Francisco Lainfiesta, in the capacity of friendly mediator, plenipotentiary of the Republic of Guatemala, having exchanged and examined their full powers, and finding them to be in due form, do record in the most solemn terms: That it having been previously stipulated by the respective parties to end in an amicable way the disagreements which have unfortunately arisen between the Republic of Costa Rica and the State of Nicaragua, belonging to the Greater Republic of Central America—disagreements which have given rise to the imminent danger of war, in every respect deplorable; being disposed to carry into effect the civilizing and honorable views which have brought about this meeting, formulate and agree upon the following points of fraternal and peaceful settlement, in virtue of which from this time every hostile intent, through the medium of arms, on the part of both contestants, shall cease, and the good understanding and harmony which ought to exist between them for the weal of the two sister nations and the honor of Central America is reestablished. Wherefore, they declare and agree that:

I.

The Republic of Costa Rica and the Greater Republic of Central America, respectively, deferring to the friendly entreaty of the Government of Guatemala and the just remonstrance of the general interests of Central America, no less than to the welfare of the two sister nations of Costa Rica and Nicaragua, at present at variance, freely accept recourse to a pacific and friendly arrangement that shall put an honorable end to the rupture which has led them to take up arms.

II.

In consequence, the forces of each of the parties, stationed on the frontier, excepting the small garrisons customary in time of peace, will be simultaneously concentrated and disbanded by both Governments so soon as and upon the day the mediating minister shall designate, and which he shall make known by telegraphic communication upon his return to land after the concluding and signing of this convention; which action implies that the two nations resume their normal tranquil state and the cultivation of their relations, temporarily interrupted by the threats of war.

III.

Resorting to the civilizing and enlightened medium of arbitration, which even warlike peoples recommend to accommodate international questions, the high contracting parties agree to submit their mutual complaints and claims to the decision of a tribunal composed of three Central Americans, one to be named by the Republic of Costa Rica, one by the Greater Republic of Central America, and a third by the Republic of Guatemala in its capacity of peaceful mediator.

IV.

The said arbitrators shall meet in the capital of the Republic of Guatemala within the term of one month after the ratification of this convention by both parties, for the purpose of properly organizing and proceeding to the discharge of their trust, adhering, with respect to arbitral procedure, to the rules following:

1. Within one month from the date of the installation of the tribunal, the contracting parties, through their representatives, shall present in writing and in detail their respective complaints and claims.
2. Upon the expiration of the term referred to in the foregoing rule, the arbitrators shall deliver to each representative of the signatory parties an exact copy of the opposing claims that may have been submitted to them, in order that, within the term of one month, they may answer as may best seem to them.
3. At the expiration of said term, with or without filing of answers, the tribunal shall grant the parties the term of one month for the filing of such proofs as may be necessary.
4. Upon the expiration of this latter term, and within the two months next ensuing, the tribunal shall make its award.
5. On petition of either of the parties, or on its own motion, the tribunal of arbitrators, at any stage of the proceedings, may request either of the parties to

furnish such documents, data, or information as may be called for or be deemed to be necessary or expedient for reference.

The tribunal, by agreement with both parties, may shorten or extend the terms mentioned either for the earlier termination of the proceedings or for the better ascertainment of the facts.

V.

Whatever may be the character and scope of the claims that the parties may bring against each other, they shall be freely submitted to the arbitration tribunal, that it may consider and decide them in accordance with international law in such terms as it may deem just and equitable.

VI.

Both parties declare that the boundary questions settled by the treaty of April 15, 1858, the award of President Cleveland, or in the convention of San Salvador of 1896, shall not be the subject of claims before the arbitrator.

VII.

The judges of that tribunal shall assume jurisdiction and decide in the capacity of arbitrators and friendly conciliators, bearing in mind the benevolence with which vexatious incidents arising between brethren should be considered, and the benefits which an immediate settlement, dictated by friendship, must bring to the common interests of Central America.

Both contracting parties bind themselves in the most formal and solemn manner to observe and faithfully execute the arbitral award in so far as it attaches to each, without having recourse to any reclamation whatsoever.

VIII.

A definitive treaty of peace and friendship will also be concluded in the city of Guatemala within the time fixed by the interested governments, between plenipotentiaries of the Republic of Costa Rica and the Greater Republic of Central America, one for each party, and a third that the Government of Guatemala, as mediator, shall name. In said treaty shall be stipulated all such conditions and obligations as may be agreed upon to insure between the two peoples of Costa Rica and Nicaragua, in a stable and firm manner, a cordial understanding that shall remove all cause of disagreement, to the end that the peace and tranquillity they are called on to enjoy shall not again be disturbed, as has happened at this time. Furthermore, the said definitive compact shall record the solemn obligation of both parties to not have recourse to arms to settle their controversies, before having appealed to the beneficent resort of arbitration.

IX.

The mediating plenipotentiary, on the part of Guatemala, binds himself to request that his Government lend its efficient guaranty of the faithful carrying out of the obligations each party assumes through said treaty.

X.

This convention shall be submitted immediately to the approval of the legislatures of the Republic of Costa Rica and the State of Nicaragua, for the purpose of obtaining the assent of the said high bodies as to the submission of the respective complaints and claims to an arbitral decision, so as to proceed without delay, when such superior authority be secured, to carry out the provisions of the respective articles of this convention.

XI.

The representatives of Costa Rica and the Greater Republic, in the name of their Governments, record a vote of thanks to the Government of Guatemala for its efficient cooperation in the friendly agreement of the parties, and to its worthy representative, the honorable minister, Señor Francisco Lainfiesta, who has known how to interpret the fraternal sentiments of his principal so nobly.

In witness whereof, and in perfect accord, we sign and seal three copies of equal tenor, as already said, on board the war ship *Alert*, of the United States Navy, in the presence of her commander, E. H. C. Leutzé, who also signs, certifying to the position of the vessel in neutral waters of the Pacific Ocean, at 4 o'clock, post meridian, of the 26th day of April of the year 1898.

[L. S.] RICARDO PACHECO.
[L. S.] M. C. MATÚS.
[L. S.] FRANCO LAINFIESTA.
[L. S.] E. H. C. LEUTZÉ.
Commander, U. S. Navy.

NICARAGUAN CONTRACT WITH PACIFIC MAIL STEAMSHIP COMPANY.

I transmit herewith a copy, with translation, of a contract between the Pacific Mail Steamship Company and the Nicaraguan Government.

The contract, while dated February 23, went into effect January 1, 1898, and was negotiated by Col. W. P. Tisdell on behalf of the steamship company.

WILLIAM B. SORSBY,
Consul.

SAN JUAN DEL NORTE, *May 5, 1898.*

The most important paragraphs of the contract are given below:

The Minister of Public Works, representing the Supreme Government, party of the first part, and Mr. Willard Parker Tisdell, representing the Pacific Mail Steamship Company, party of the second part, have celebrated the following contract:

I. The Central American line of steamers between Panama and Champerico shall make one trip monthly, calling, going and coming, at the ports of San Juan del Sur and Corinto and at the principal ones of Central America.

II. The Mexican line of steamers, between Panama and Acapulco, shall make one trip monthly, calling, going and coming, at the above-mentioned ports of San Juan del Sur and Corinto and at the principal ones of Central America and Mexico, making connections at Acapulco with steamers that go to San Francisco and the northern ports of Mexico, or come from those ports.

III. Every month one of the direct line of steamers from Panama to San Francisco shall call at Corinto going and coming. All these steamers shall carry freight, mails, and passengers; so that there will be connection at Colon for New York. Moreover, there shall be a steamer of the line direct to San Francisco that shall call at Corinto on the 10th of every month on her way to the south, with the object of receiving and disembarking mails and passengers, and to make connection at

Colon for New York, in order that there may be three connections monthly between Corinto and New York. The pursers of the lines of steamers before mentioned shall send direct to the Minister of Hacienda an authorized copy of the manifests of the freight brought for the ports of the State.

IV. The steamers referred to, with the exception of the direct steamer to San Francisco that calls at Corinto the 10th, shall bring and take the freight, imports, and exports that may be at the ports of Nicaragua. During the season for the exportation or transportation of coffee, each steamer shall reserve at least 150 tons in bulk for each trip to the ports of Corinto and San Juan del Sur; but if there be too much freight, the officer of the port shall notify the agent of the company at the said port in order that necessary room may be reserved on the next trip.

V. The company is also bound to bring and carry away with each trip of the steamers all the packages of correspondence, written or printed matter, having come from San Francisco and intermediate ports or going thereto; delivering or receiving them at the ports of Nicaragua where the steamers shall call according to this contract. The Government of Nicaragua shall fix a tariff of postage on said correspondence, and shall consider its value as a revenue of the State. * * *

VI. The company shall convey on its steamers, with a reduction of 25 per cent on its passenger tariff, mechanics, laborers, workmen, and others who immigrate to the State from any of the points at which the steamer touches and who have been contracted for or engaged by the Government, which shall be demonstrated by corresponding documents. * * * All Government freight coming from or going to ports of the State on the Pacific shall be transported by the company's steamers at a reduction of 25 per cent, providing that the bills of lading are received by the company.

VII. The service shall be conducted as promptly and safely as possible, and the steamers shall call at the ports of Nicaragua on the dates of the itinerary issued by the company, except when prevented by accident, bad weather, or some other insuperable cause. * * *

VIII. For each time the steamers fail to conform with their regular itinerary for the ports of Nicaragua that are stated in this contract, or are eight days late according to the itineraries to be made public in good time by the company, the amount of the subsidy which corresponds to the time lost shall be forfeited, except in those cases specified in Article VII. The captains of the ports are the representatives of the Government in fulfilling the stipulations of this contract, and are to take account of the failures of the company upon which claims shall be made.

IX. The company binds itself not to increase the tariff for freights and passengers between Nicaraguan and other Pacific ports without first advising the Government and obtaining its authorization.

X. The company also binds itself not to transport troops and munitions of war to any of the ports of Nicaragua or to any port convenient thereto when it is evident that they intend war or pillage.

XI. The company is strictly bound to prohibit its employees aboard its vessels to sell wine, liquors, and any article dutiable or the introduction of which is prohibited.

XII. For the service of steamers expressed in this contract the Government shall pay the company 9,000 pesos ($3,681) annually in legal silver. The payments are to be made every three months in the capital or in Corinto, at the option of the Government, to the agent of the company in the said port, and said payments are to be exempt from all duties of exportation. After April 10 proximo the direct (through) steamer from San Francisco will commence to touch in Corinto to discharge and receive mails and passengers.

XIII. The steamers of the company are exempt from all port dues of whatever nature or whatever charges established or which may be established, except for light-houses, which shall not exceed 25 pesos ($11)* per annum for each steamer, and which shall be paid only in those ports where light-houses are regularly maintained.

XIV. If the steamers of the company, at any time or for whatever cause, carry the mail pouches beyond the port of destination, the company may disembark the same in any of the authorized ports, to be returned in another ship free of all contributions or dues existing or to be established; but in no case shall Nicaragua be liable for any loss or deterioration of any of the merchandise deposited in its warehouse.

XV. If at any time during the existence of this contract the company should wish to sell or rent the line of steamers, conveying its rights and privileges under this contract, the Government of Nicaragua must first be advised, and the company or persons who rent or buy must guarantee to the Government the performance (compliance with) of this contract.

XVI. The agents of the company will have free use of the telegraph of the State for the use and service of the steamers.

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XVIII. The differences that may occur between the Government and the company with relation to this contract shall be decided by a tribunal of arbitrators, one to be nominated by each party, who, in turn, shall designate a third in the event of a disagreement. The finding of the arbitrator or the umpire shall have the force of a judicial sentence, without the right of appeal by either of the parties. The company shall have the benefit in all cases of fortuitous circumstances, or when an unavoidable infraction of this contract occurs.

XIX. The company shall be responsible for the articles lost to shippers by theft when the captains refuse to receive the cargo when it has been presented (offered) in time for embarkation, if the refusal was made with the notice embodied in Article IV, or if justifiable cause for the refusal does not exist.

XX. The term of the present contract shall be two years, counting from the 1st of January of the present year.

MANAGUA, *February 23, 1898.*

NOTES ON THE PHILIPPINE ISLANDS.

Ambassador Hay sends from London, under date of May 18, 1898, a pamphlet written by Mr. Frank Karuth, F. R. G. S., entitled A New Center of Gold Production, describing conditions in the Philippines. Mr. Karuth, who is president of the Philippines Mineral Syndicate, Limited, says in the letter to Ambassador Hay accompanying the pamphlet:

These notes were written in 1894. Since then the exploratory work under my direction has been carried on as vigorously as circumstances permitted. At all events, extensive auriferous ore deposits have been opened up quite near the sea, assuring a large output for many years to come. Also, the continuation of the auriferous formation has been proved over a wide district.

The complete absence of practicable roads throughout that district, and, indeed, throughout the islands, must at first confine mining operations requiring heavy plants to points near harbors or navigable rivers. But such points, I venture to say, are numerous enough to give rise to prosperous industry. I know of no other part of the world, the Alaska Treadwell mines excepted, where pay ore is found within a few hundred yards of the anchorage of sea-going vessels. So far the fringe only of the auriferous formation has been touched. There is no brook that finds its way into the Pacific Ocean whose sand and gravel do not at least pan the color of gold. Heavy nuggets are sometimes brought down from the sierras, where, I believe, there are promising fields for hydraulic mining. Alluvial gold is also got in the Island of Mindanao, especially in the districts of Surigao and Misimis, on its northern coast. Extensive deposits of copper ore occur in Luzon, which will probably prove remunerative when means of transport have been devised.

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* Taking the valuation of the peso April 1, 1898, by the Director of the United States Mint.

Galena, both auriferous and argentiferous, is found in veins in Luzon and Cĕbu, sometimes accompanied by zinc blends.

I do not know of the occurrence of true coal in the islands. The beds which have been intermittently worked in the islands of Cĕbu and Masbate, consist of lignite of very good quality. Some years ago large outcrops of such coal were found near the beach in the Island of Masbate, but most of it, which could be got without mining, has been removed for the use of interinsular steamers. One of the syndicate's engineers, a man of experience as manager of coal mines in Lancashire, found Masbate coal quite useful for steamers. He calculates the quantity of coal available in a concession of about 60 acres at 1,200,000 tons. The Masbate beds are so tilted as to form an angle of 70° with the horizontal.

I have also evidence of the occurrence of gems in an upper valley of the sierra. One of the engineers observed in a sample of roughly washed alluvial gold brought down by the aborigines certain small stones, which, on examination in the Schools of Mines in Kensington, were found to be rubies and hyacinths. I was unable to detach a party for the examination of the locality, but I have marked it.

We were at no time in want of labor at cheap rates, though at times we employed several hundred men. The Bicol miners are adepts by atavism in their work, and soon adapt themselves to European methods. On the whole, the general conditions for mining enterprises are exceptionally favorable.

Extracts from the pamphlet are given below:

A NEW CENTER OF GOLD PRODUCTION.

It is not improbable that ere long we may have to reckon with these islands in the Far East as factors in the world's gold production. That the precious metal is widely distributed in the archipelago is known to all who know a little more of it than its name, but they are few in number. Few also are the sources whence information can be drawn. Not five books in the English language are worth consulting about them. Crawford's History of the Indian Archipelago, published early in this century, is still the student's text-book. Whatever has been published since then, when it rises above the level of a mere traveler's tale, is either not comprehensive or not reliable. The work of Jagor, the German naturalist, of which there exists a fairly good English translation, is rough and fragmentary, and not rarely wrong in its generalizations. * * *

The number of the islands which form the Philippine Archipelago will astonish many readers. It is said to approach two thousand. There are two among them larger than Ireland—namely, Luzon with 42,000, and Mindanao with 38,000 square miles; and there are other islands with 5,500, 5,000, 4,500, 4,000, 3,500, and 3,000 square miles. * * * The character of the fauna and flora of the Philippine Islands is, to a certain extent, of the Melanesian or Australian type, and differs widely from that of the Malayan Archipelago, from which it is separated by a narrow, but very deep strip of sea. The Philippines rejoice in that distinctly Australian bird, the cockatoo, as an indigenous member of their avifauna, and in the entire absence of the tiger or any other representative of the large *Felidæ*. There are reasons for the hypothesis that the Philippine Islands are peaks, mountain ridges, and table-lands of a submerged continent, which in a very early geological period extended to Australia.

The geology of the Philippine Islands is to a very large extent a mere matter of conjecture. Their conformation and the exuberantly luxurious tropical vegetation render surveys and explorations more than ordinarily difficult. Only a few districts have been cursorily surveyed and reported on. * * *

The active operations of the Philippines Mineral Syndicate are at present confined to a district in the eastern part of Luzon, where the following formations have been observed, viz: Groups of chloritic slates, diabase and gabbro, eocene limestone, and recent formations with marine fossils.

Almost everywhere in the islands are the results of volcanic forces in evidence, although the number of active volcanoes is small. The volcanoes, active and extinct, are grouped in two lines, running, approximately, east and west. Earthquakes are not infrequent, and the buildings are designed to resist them. The more violent seismic disturbances appear to be confined to certain centers, among which the neighborhood of Manila, the capital of the islands, situate in Luzon, seems to be prominent. The mining concessions of the Philippine Mineral Syndicate, Limited, of London, which are scattered over an area of several hundred square miles in the east of Luzon, have in two years been visited by only one very slight shock, which passed off without the smallest inconvenience or damage. The orography of the group is very complicated. In a general sense, the direction of the chains of mountains is north and south, with occasional deflections to east and west. The highest mountain in the group is Apo, in Mindanao, with over 9,000 feet, whilst Halcon, in Mindoro, reaches nearly 8,900 feet, and Majon, in Luzon, exceeds 8,200 feet.

The archipelago lies between 4.40 and 20 north latitude, and 116.40 and 126.30 east longitude. The seasons are divided into hot and cool, or wet and dry, and vary according to the aspect of the country. Regions exposed to the southwest monsoon have their wet season, whilst on the other side of the mountains people enjoy the dry season. The rainfall is not excessive for the Tropics, nor is it continuous, for occasional breaks lessen the discomforts of the wet season. The climate is very healthy for the Tropics, and diseases—*e. g.*, yellow fever—are unknown.

The bulk of the natives are of a race akin to the Malays, though pure Malays are only settled on the south coast of Mindanao and the neighboring islands, where at times they give a little trouble to the authorities. In the interior of Luzon and some of the other islands the remnants of a race of natives of undoubtedly Papuan origin are found, still as untamed, and given to roving through the forests, as the Spaniards found them over three hundred years ago. They, like their Australian kinsmen, fly from civilization and succumb when forced into contact with it. A very interesting account of the inhabitants is given by Mr. Palgrave, late Her Majesty's consul in the Philippines, in an article in the Cornhill Magazine, entitled "Malay life in the Philippines."

Mr. Palgrave speaks in glowing terms of the fertility and beauty of the eastern isles. * * * "Dull indeed," he says, "must be his soul, unsympathetic his nature, who can see the forests and mountains of Luzon, Queen of the Eastern Isles, fade away into dim violet outlines on the fast receding horizon without some wistful remembrance, some pang of longing regret. Not the Ægean, not the West Indian, not the Samoan, not any other fair island cluster * * * can rival in manifold beauties of earth, sea, and sky the Philippine Archipelago. Pity that for the Philippines no word limner of note exists. The chiefest, the almost exceptional, spell of the Philippines is situate, not in lake or volcano, forest or plain, but in the races that form the bulk of the island population. I said 'almost exceptional,' because rarely is an intra-tropical people a satisfactory one to eye or mind. But this can not be said of the Philippine Malays, who, in bodily formation and mental characteristics alike, may fairly claim a place not among the middling ones merely, but among almost the higher names inscribed on the world's national scale. A concentrated, never-absent self-respect, an habitual self-restraint in word and deed, very rarely broken except when extreme provocation induces the transitory but fatal frenzy known as 'amok,' and an inbred courtesy, equally diffused through all classes high or low, unfailing decorum, prudence, caution, quiet, cheerfulness, ready hospitality, and a correct, though not inventive taste. His family is a pleasing sight, much subordination and little constraint, unison in gradation, liberty not license. Orderly children, respected parents, women subject but not oppressed, men ruling but not despotic, reverence with kindness, obedience in affection—these form a lovable picture, not by any means rare in the villages of the eastern isles. The villagers' houses, some large, some small, wood or bamboo, two storied or one, mere huts or spacious dwellings, according to the fortunes of the inmates, are dotted here and there in an unsymmetrical row among the trees; but all have a comfortable, a cozy look, suggestive of sufficiency; many of them white, painted with stripes green or blue, rarely red, and occasionally a flower pattern or fanciful scroll work to enliven them more. Eight million natives, more or less, inhabit the Philippines, and yet scarcity is of rare occurrence; famine unknown. * * * Of all tropical lands, all tropical races that it has been my lot to visit, none will have left a pleasanter or more heart-satisfying memory, than the Philippine Archipelago, the home of the half-civilized Malay."

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The Philippine Islands are under the supreme charge of a governor-general, who resides in Manila, a town of considerably more than 300,000 inhabitants, among them a goodly number of British men of business, whose well-appointed club is the center of foreign and social intercourse. In Madrid the interests of the colony are specially entrusted to a council of state for the Philippines, which acts as an advisory body to the Minister of the Colonies. There is also a council of state in Manila, which has a voice in questions affecting the material progress of the islands, which are divided into provinces, each under its governor. The provinces are subdivided into districts, and these again into communes or parishes. The gobernadocillo (little governor) stands on the lowest rung of the official ladder, being the elected head of a commune, and wearing as the symbol of office a stiff, mushroom-shaped hat, resplendent with solid ornaments of silver bullion. In these communes or parishes the cura (priest), especially if he be a Spaniard, as is generally the case in the more important parishes, exercises supreme power. He is the father and councilor of his people, and helps them not only with spiritual advice, but also furthers their material interests. Many of these Spanish curas have done much good work in the way of making roads and bridges, and the building of churches, acting frequently as their own engineers and architects with far less unsightly results than one might expect from persons who are supposed to be more conversant with breviary and rosary, than with rule and compasses.

The Spanish priests, friars of strict orders, come to the islands for aye and good, and, with scarcely any exception, do their duties faithfully and devotedly. Priests of native extraction do not quite come up to the high standard of their Spanish confratres. They can not all live up to the severity of monastic rules. These native curas, moreover, suffer under the proverbial disadvantage which affects the prophet in his own country, and, lacking the strength of mind and tenacity of vow of the Spanish priests, sometimes seek consolation in diversions of not quite a clerical or monastic character.

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On the whole, the Philippine natives find and take life easy. Their requirements are few. The sum of £5 will provide a native household with a dwelling of its own and ample furniture. Under a genial climate; on a soil lavishly grateful for the slightest tending; by waters teeming with fish, they know naught of hunger, and have much time left for amusements—such as dancing and public rejoicings on the smallest occasion, music, for which they have a natural talent, so that there is scarcely a commune without a fairly trained brass band—and gambling! Cockfighting is the national sport, and no mean source of revenue to the authorities. Almost every native owns a fighting fowl, which is as dear to him as her lap-dog to a European lady. He carries it about with him and bets his bottom dollar on its performance in the arena. Thus the native is an intermittent rather than a steady worker, and his delight in feasts and holy days, and his content, which passes him off as rich in his own mind with $10 in his purse, make him as a laborer, docile as he is and willing to please, a source of frequent annoyance to his employers.

After this slight sketch of the country, its institutions and inhabitants, a glimpse may now be taken of mining matters. * * * Proceeding in the order of seniority, also in that of widest distribution, gold mining will take the first place.

There is no doubt that mining for the precious metal was practiced in the islands long before the advent of the Spaniards.* In fact, it may be that the alluvial deposits, accessible to the Chinese and Malay traders, who had intercourse with the islands long before they were known to Europeans, have been to a great extent worked over and over again. The tools which the natives use—a washing board and a wooden bowl—are of great antiquity, and form a prominent feature in the household utensils of all native villages in the auriferous regions. * * * Boulders and fragments of quartz with visible gold occur in many alluvial deposits in the islands, and it is not likely that the natives would have thrown them aside without endeavoring to extract the gold. This they probably did, as they do it even now, by pulverizing the quartz by hand and washing it like they wash the auriferous gravel and sand. The only improvement on this rude process was the introduction by the Spaniards in some districts of the Mexican "arrastra," a block of rock moved by buffalo power like a millstone on a nether block. The charge of an arrastra is about 250 pounds. Float gold and auriferous pyrites are lost in the process. It is doubtful whether to this day the natives are aware of the auriferous character of the pyrites, which almost always accompany the auriferous quartz, sometimes in not inconsiderable proportions.

Thus the production of gold by washing alluvial deposits and pounded quartz is an old-time industry in the Philippines, followed to these days by nearly all in the auriferous districts in a desultory way when the sowing is done or the rice harvest gathered; when the overdue capitation tax, or an approaching holiday, with its cockfights, makes the possession of a few dollars in cash more than usually desirable. Mr. James Hilton, M. E., who visited Luzon in 1890–91, and Mr. George Simpson, a veteran Ballarat gold-mining captain, who arrived there in 1892, give in their reports interesting details regarding native mining methods, some of which are worth mentioning. Mr. Hilton says: "The occurrence of valuable mineral deposits in the Philippine Islands is well known, and it might be supposed that the colonists would endeavor to profit by the wealth which nature has placed at their disposal, the more so as the mining laws of the land are liberal, the taxes the reverse of onerous, and the conditions generally favorable. Nevertheless, as a matter of fact, mining, as the skilfully and intelligently conducted industry, that we know elsewhere, does not exist in the Philippine Islands. * * * I was taken to see a vein of gold quartz, but found the shaft full of water and ascertained the only means of draining it was by a posse of seventeen natives, who, forming a chain, handed palm-leaf buckets from water level to surface. The only means of crushing the gold quartz was a ponderous stone moved by buffaloes. Amalgamation is not known. The stuff is washed in wooden bowls, and it takes at least 400 of them to deal with a ton." * * * Describing the working of a mine at Mambulao, in the Island of Luzon, Mr. Simpson observes: "The Indian miners' mode of operations was based on sound engineering principles, in so far as draining is concerned, as shown by their putting in the, to them, very costly adit from the creek at the foot of the hills on which the mines are situated. They bailed the water out with small buckets, holding from 2 to 2½ gallons each, and by literally filling the various shafts with men, who passed the buckets from one to another, they managed without either powder or dynamite, or any other explosive, to realize some thousands of ounces of gold. This is the barbarous method adopted."

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* NOTE BY MR. KARUTH.—Dr. von Moellendorff, an expert sinologist, and formerly German consul in Manila, has informed me that he has a Chinese book in his possession, dating from about the third century A. D., in which a trading voyage from Amoy to Manila is described. Gold is mentioned as the chief product of Luzon, and names occur which are still recognizable in the present nomenclature of Luzon.

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By preference the native miners work where bailing is not necessary, but such opportunities are not frequent. When they occur, the natives make the most of them. Mr. Carnegie Williams, the able general manager of the Philippines Mineral Syndicate, reports that in one case the natives have removed an entire hillock down to sea level. They must have dealt with immense quantities of paying quartz, for they remove nothing that does not pay them. This hillock, to judge by the general conformation of the mountain ridge, of which it formed part, must have been at least 400 feet high and correspondingly broad. Spaniards and Spanish companies, in most cases with absurdly inadequate capitals, have also worked in the district, but in all cases without pumps or any other machinery than the time-honored "arrastra." They never dealt with pyritic ores, but treated the quartz only for its free gold. In one instance at least, that of Mambulao, their workings assumed important dimensions. Mambulao means in Bicol language the "Place of Gold," and certainly the precious metal is strongly in evidence in the district. Here a vast adit, opening near the sea in solid masonry, has stood the neglect of decades, and may probably be made useful again by the present proprietors of the mines. Record has it that when they flourished the weekly sales of gold amounted to over 1,000 ounces, all produced in the primitive way by washing the pounded quartz.

* * * The most serious impediment to mining in the Philippines is the utter absence of practicable roads. The natives with their primitive ways of working do not feel the want of roads. They trudge contentedly single file, laden with their simple implements, through the trackless primeval forests, cutting their way patiently through endless tangles of lianas and swaying labyrinths of luxuriant greenery, which would make a botanist's heart swell. In many parts vehicles of any kind are unknown; in others, their only representative is the creaking country car, drawn by a pair of stolid buffaloes.

The engineers of the Philippines Mineral Syndicate were driven to many odd shifts when moving heavy machinery from the port to the syndicate's chief estabment. In the first place, a road had to be made, and, though it is barely 3½ miles long, half a dozen bridges had to be built, roughly, yet strongly enough to bear the weight of many tons. And when the road was ready, native carriers asked absurd sums for the conveyance of a couple of boilers, weighing 4½ and 3½ tons respectively. In the end a simple sledge, devised by British ingenuity, did the job for a small fraction of the sum asked by the natives. * * *

Thus far the fringe only of its particular district has been investigated by the Philippines Mineral Syndicate. Also, another district, hundreds of miles away from the syndicate's chief establishment, has been examined, with the result of finding an extensive alluvial gold field at the foot of the mountains. There also the natives have worked in their usual fashion, riddling in places the ground like a sieve with their pits. It is well known that the natives in the mountains, which to a great extent are unexplored, all traffic in gold, and from the general evidence it seems probable that the auriferous formation, from which the alluvial deposits were stocked by the process of erosion, continues throughout the backbone of the island. But for practical purposes British mining enterprise must keep near the coast for years to come, until, in the progress of events, more distant mines can be reached with convenience.

The question is often asked: "How is it that so little is known of Philippine gold?" The answer is simple. There is no official control of the output, or tax on it. The miners live in isolated districts and villages, with rare communication between them. And the universal man of business is the omnipresent Chinaman, now storekeeper with a fixed abode, now perambulating peddler, who penetrates the most distant settlements, buys the gold with his wares, and sends it out of the country, over to Hongkong or Amoy, or elsewhere. It is not his business to swagger over the volume of his trade; in fact, he keeps it dark. Those who know are aware that the gold export is considerable and very much exceeds the official computation, whatever that may be. "Paracale" gold is well known in Manila, but few Manilese know where Paracale is, and still less have ever visited the place. Yet it is a prosperous village, with a good deal of trade and a large native mining population. * * * The Paracale gold dust is melted into tiny ingots, a small bivalve serving as mold, so that the gold shows the shape of the shell. These tiny ingots are tested by the Chinese purchaser, the traces of whose probing auger are always in evidence on the ingots.

Gold is found in many other islands of the group. Señor Abella found traces of alluvial workings in Cëbu. Mindoro, which is but little known, is said to be rich in gold. Panaon, a small island north of Mindanao, has at least one well-defined vein of auriferous quartz, whilst Mindanao itself is the center of a considerable trade in alluvial gold. From specimens brought from that island, the occurrence of rich quartz veins can not be a matter of mere conjecture. Mindanao, though the first discovered island of the group, is the least known and least settled of all. Many points, especially on the south coast, are still held by Malay sultans and rajahs, who, whilst acknowledging the suzerainty of Spain, have not the power nor the inclination to keep their lieges from their traditional piracies. It is from some of these Malay strongholds that the prahus of the Orang Laut (man of the sea) sally forth on plundering cruises. * * * This iniquitous trade has been stopped on the coasts of Sumatra and Borneo, and it will soon be stopped in Mindanao, where the Spanish Government is now taking drastic repressive measures.

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Mining by modern methods will, in the course of time, make curios of native mining implements, at least wherever the engineer can take his machinery without breaking the back of the capitalist. * * * In respect of mines by the seashore, the Philippines are unrivaled. Even now a narrow peninsula jutting out into the broad Pacific, a headland of white, glittering quartz, is being prepared for the reception of a crushing plant with its appurtenances, and the machinery will be landed almost alongside of the mill site. The peninsula is a vast ore deposit, and, if experienced men are not utterly mistaken, it will soon take a front place among notable mines.

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Copper is found in many parts of the Philippines, and cupreous pyrites is not unfrequently met with accompanying quartz veins, but in such small quantities as to exclude all commercial value. In the central mountain ranges of Luzon, however, between Cagayan and Ilocos, considerable deposits of copper ore are distributed and have been worked by a tribe of natives, called Igorrotes, long before the advent of the Spaniards. * * * They obtain the ore in excavations, which they make with the aid of wood fires, thus softening the rocks. They separate the ore according to quality, and roast the poorer repeatedly before smelting it. Their furnace is a cylindrical hole, walled with clay, about 12 inches deep and 8 inches in diameter, and they use blowers of bamboo worked with plungers to produce the requisite draft.

A Spanish company was established to work these deposits on a large scale. Furnaces were built, machinery was put up, but what the natives could accomplish the European metallurgists failed to do, although in those times copper was worth over £100 per ton. The absence of roads told, and the enterprise eventually collapsed.

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A very peculiar deposit of native copper occurs in the neighborhood of one of the Philippine Mineral Syndicate's concessions. The metal is found in a bed of gravel, in little nuggets of a globular or pear-shaped form. It assays over 90 per cent of copper, with a not inconsiderable admixture of gold and silver. The extent of the deposit and its commercial value have not been determined as yet, and its origin is rather puzzling. May it not be the product of a natural smelting process, for which the proximity of eruptive rocks has furnished the thermal conditions? The necessary fluxes were close at hand, and supposing a cupreous deposit with such fluxes near an eruption of lava and so tilted as to allow the dropping of the melted copper from a height, these globular or pear-shaped nuggets would be accounted for.

The heat supply of the eruptive rocks may also account for the "red lead" mines, which Jagor mentions. Red lead (PbO) is obtained by heating massicot, the monoxide of lead (Pb_1O), to a temperature of 600 F. Massicot is found in the district, and given just the necessary heat—no more, or melting would spoil the process—the metamorphosis of monoxide of lead, massicot, into the oxide, minium or red lead would be the result. Lodes charged with sulphite of lead—galena—occur on two or three of the sydicate's concessions. One is now in process of examination and promises a good result, for the galena is rich in gold and silver. If it be found worth working, the ore will be shipped home for treatment. Veins of galena with a good percentage of gold and silver occur in the Island of Cĕbu. Some years ago a local company undertook their development, with the usual result—abandonment for want of funds.

The coal which up to present times has been found in the Philippine Islands is not true coal, but lignite, probably of the Tertiary period, and of a variety which can scarcely be distinguished by the eye from true coal. There is no reason why true coal should not eventually be found, for it is found and worked in Japan, whose geological formation has much in common with that of the Philippines. There has been no systematic search made in these islands for coal, and wherever it has been found, it has betrayed its presence by outcrops. Thus, in the Island of Masbate, a local steamship owner drew his supplies from a bed of coal which is so tilted as to have the appearance of a vein. He supplied himself as long as his native laborers could get the coal with crowbars. Mr. Hilton, who examined this bed cursorily, estimated the available quantity of coal at about 600,000 tons in that particular concession. He is, however, of opinion that very much larger quantities are available in adjoining concessions. These mines are practically untouched, and, as they are situated within a few miles of the coast, they can be worked at a profit by whomsoever should venture to introduce the necesssary capital. Mr. Hilton, after trying it in a local steamer, gives it the character of a "very good steam coal." A similar quality of lignite has recently been found in the district where the Philippines Mineral Syndicate is now working, and it will soon be tried for the production of steam.

The only coal deposits which have been to a certain extent developed in the Philippine Archipelago, and of which a scientific and reliable record exists in the shape of a report by the chief inspector of mines, Señor Enrique Abella y Casariego, are those in the Island of Cĕbu. This report is embodied in a work entitled "Rapida Descripcion Fiscica, Geologica y Minera de la Isla de Cĕbu (Archipelago Filipino)." * * * The coal deposits of Cĕbu were first examined in 1855 by the Government mining engineer, Señor Hernandez, who without hesitation described the coal as "lignita" (lignite). A few years later, however, another Government engineer, Señor Centeno, declared the formation in which coal occurs to belong to the true carboniferous system, and proclaimed the discovery of a true coal field of large dimensions, the eastern rim of which cropped out in the Island of Cĕbu, whilst its western rim came to the surface in the Island of Negros. Analysis proved Señor Centeno to be in the wrong, for the contents—or carbon—of the coal of Cĕbu do not exceed 54 per cent, against the minimum of 75 per cent, which true coal contains.

Señor Abella describes the Cĕbu coal as *lignita piciformes* (pitchy lignite), very black, and in some instances resembling cannel coal. In carefully conducted official trials, best Cĕbu coal figured as follows in relation to good Australian and British coal, viz, 156 parts Cĕbu equal to 147 parts Australian and 121 parts British coal.

The carboniferous formation extends over the greater part of the Island of Cĕbu. From Balamban and Sogod, as far as Malabuyuc and Bojoon, a distance of over 50 miles, there is scarcely a village that has not its show of coal outcrops. These have been worked on many points, and the aggregate amount of development is not inconsiderable.

At one time the Government attached so much importance to the coal deposits in Cĕbu that it established a monopoly, but this was soon abandoned and the industry thrown open to all comers. For a time coal mining in Cĕbu became quite a rage; any number of concessions were taken up, and several companies established for their development. In one or two cases a considerable amount of capital was expended. Although faults frequently occur, large quantities of workable coal were found; but the absence of roads and the necessity of investing large sums in railways in order to meet the competition from England, Australia, and Japan soon caused a reaction and put a stop to the industry. The present annual production of Cĕbu does not meet one-tenth of the demand of Manila, where the annual consumption of coal exceeds 60,000 tons. * * * In the mines of Ulung five beds have been ascertained to occur, measuring, respectively, 3 feet 8 inches, 3 feet 8 inches, 3 feet 8 inches, 5 feet 8 inches, 5 feet.*

No systematic search for banks of pearl shells has been made within the limits of the archipelago, but from indications it would be well worth while to bestow a little attention to that branch of industry. Beautiful pearls are found in the neighboring Sulu Archipelago, and pearls of very fine quality, but of unknown origin, are sometimes brought to Manila, where they meet with eager purchasers.

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* NOTE BY MR. KARUTH.—True coal has not been found as yet in the islands. All the coal mined in Cĕbu, Masbate, and elsewhere is "lignite" of very good quality, but wanting the proportion of carbon which is characteristic of true coal. True coal will perhaps be found in the islands of Mindero and Mindanao.

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Few outside the comparatively narrow circle who are directly interested in the commerce and resources of the Philippine Islands know anything of them. The Philippine merchants are a rather close community, which only in the last decade or so has expanded its diameter a little. There are a number of very old established firms amongst them, several of them being British. * * * Amongst them also are firms—perhaps, as far as wealth and local influence go, the most important firms—whose chiefs are partly at least of native blood.

In the old days money was made more easily than nowadays. It used somehow to flow into the merchants' coffers without any particular effort in directing the flow on his part. But those times are no longer. Cables, weekly mails, and the influx of younger men with modern ideas have disturbed the somnolent complacency of the old times. And the fall in the value of the dollar has added its own particular bitterness to the trouble caused by the inroad of competitors and by the equalization of chances by the tale-telling cable. Nevertheless, the field is still a good one, and, with the era of progress which seems to have set in in the Philippines, there will be room for many more.

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In 1891 the Philippines' exports to Spain amounted to $22,479,000 ($18,095,595). In 1891 the Philippines' imports from Spain amounted to $17,126,000 ($13,786,430).

The total exports from the Philippines in 1892 consisted of 95,016 tons of hemp; 3,951,060 piculs (553,148,400 pounds) of sugar; 21,223 piculs (2,971,220 pounds) of coffee; 61,459 piculs (8,604,260 pounds) of sampan wood; 5,570 piculs (779,800 pounds) of Indigo; 254,428 quintals (56,091,197 pounds) of tobacco leaf; 137,059,000 cigars. The total exports in 1892 were of the value of $33,479,000 ($23,803,569).* Total value of imports in 1892 were of the value of $27,000,000 ($19,197,000).

* * * * * * *

Manila hemp is the fiber of a species of banana (*Musa textilis*) which thrives only in certain localities, where it is cultivated by the natives. The fiber is still produced in the old native way, by scraping the leaves with a peculiar knife, which requires expert handling. Numberless contrivances to supersede this simple process have been tried and patented, but without success. The native way is still the best, and it produces a fine fiber of which thread is spun and cloth woven that excels the best Tussore silk.

The manufacture of sugar is not carried on in a large way, but on small plantations with antiquated machinery. There are a few large factories, but they are isolated. Some years ago an enterprising Australian established a central sugar factory, and laid down miles of pipes for the conveyance of the cane juice to the boilers, and generally went to vast expense. The factory was there, and the engines with the most recent improvements, vacuum pans and what not; the only thing that was wanting, was the plantations to supply the juice. And thus the money was lost, and the pipes that were to conduct the cane juice now convey limpid water to the inhabitants of Manila. * * *

In closing these notes, the writer merely wishes to add, that well-directed energy and judiciously applied capital will bear good fruit in the Philippines. * * *

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* United States currency, taking the average value of the Mexican dollar for that year, as given by United States Treasury estimates.

FOREIGN COMMERCE OF CHINA IN 1897.

The foreign trade of China for the year 1896 was the largest ever recorded, amounting to 333,600,000 haikwan taels ($270,633,000).* It is gratifying to announce that, in spite of the facts that the year 1897 opened with large stocks on hand, and that the import business was early hampered by falling exchange and by startling political events in the north—such as the seizure of Kyao-chau by Germany and the impending danger of the partition of China—still, the trade largely increased. The value of imports was 238,631 haikwan taels higher than in 1896, and the value of exports showed an increase of over 32,000,000 haikwan taels, the total value of the foreign trade aggregating 366,329,983 haikwan taels ($271,002,605).

In this report statistics are furnished from the new open ports: Szemao, on the Yunnan frontier, and Samshui and Wuchow, on the West River. Four ports of call were also established on the West River—at Kongmoon, Kumchuk, Shuihing, and Tahking, and the business done at these ports is not inconsiderable.

Low exchange, of course, promoted manufacturing; cotton mills and silk filatures are increasing, and new enterprises have been undertaken at various places.

REVENUE.

The total receipts of 1897 were 22,742,104 haikwan taels ($16,823,471), being the third best year on record. The gain in the total arises from increased receipts under opium duty, likin, and coast-trade duties, and transit dues.

COMPARISONS WITH FORMER YEARS.

The value of opium imported in 1897 represented over 27 per cent of the total value of the imports; in 1897 it represented less than 14 per cent. The cost of the foreign drug has increased since the closing of the Indian mints. The trade in cotton piece goods shows a falling off from the figures of 1896. American goods, however, continue to increase in favor, drills showing an improvement of over 300,000 pieces, jeans of over 15,000 pieces, and sheetings of nearly 170,000 pieces. These are almost the only exception to the general decline. The favor shown American goods is due to their cheapness and to the low freights. Woolen piece goods and metals show a decline. The importation of kerosene oil has greatly increased; but American oil is finding vigorous rivals in Russian and Sumatran oils.

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* The reductions in this report have been made on the basis of the averages for the years 1896 and 1897, estimated from the quarterly statements of the United States Director of the Mint. The average for 1896 was 1 haikwan tael=81.1 cents; for 1897, 73.9 cents.

The importation of raw cotton increased, as did sugar, brass buttons, window glass, and umbrellas.

EXPORTS.

Low exchange caused a steady increase in the export trade, the value for the year 1897 amounting to 163,501,358 haikwan taels ($120,950,130), nearly double that of 1887. Nearly every item, except tea, has shared in the increase. Quantities, as well as values, have grown.

SHIPPING.

The shipping of China for 1897 shows an increase. The entries from foreign ports were 5,281 vessels, aggregating 4,799,000 tons, as against 4,722 vessels, aggregating 4,793,000 tons, during 1896. The coastwise trade also increased. The total tonnage inwards and outwards was 33,752,362 tons, and of this total Great Britain had 65 per cent; China, 23 per cent; Germany, 5 per cent; Japan, 2 per cent; Sweden and Norway, 2 per cent; France, 1 per cent; United States, 1 per cent; and all other countries, 1 per cent.

TREASURE.

Gold, worth 8,511,700 haikwan taels ($6,316,530), was exported. Silver, worth 1,641,500 haikwan taels ($1,214,300), was imported, and sycee, worth 18,904,000 haikwan taels ($13,984,234), exported.

TRADE WITH THE UNITED STATES.

I reported last year that for the first time since the customs certificates have been published, the direct imports from the United States exceeded in value the direct exports thereto. Last year the proportion apparently changed. The imports from the United States amounted to 12,440,302 haikwan taels ($9,202,713), and the exports to 17,828,406 haikwan taels ($13,181,563); total, 30,268,708 haikwan taels ($22,384,276). In my report last year, above cited, I called attention to the undoubted fact that these figures represent only the direct trade from American ports to Chinese ports, and do not show the actual amount of American goods imported and consumed in China. Many millions of taels' worth of goods produced in the United States find their way into this market via England, Hongkong, and other places, and appear in the customs returns to swell the imports from these places.

Nevertheless, it must be conceded that, owing to the low exchange, the exports to the United States have increased out of proportion to the imports.

It may be said in general that the prospects for American trade with China are bright. Locomotives, machinery, and mining plants have been largely imported during the past year. Manufacturers are taking occasion to be represented here by competent agents. It is believed that railroad supplies can be furnished from the United States at lower rates than from any other country. The era of railroad building has come for China, and the market is boundless. Day by day new ports are being opened to trade. The internal waters of China have been opened to steam navigation. A steamer has reached Chungking through the Yangtze gorges. If the autonomy of China is preserved, there will be an immense development of trade, in which the United States will greatly share.

MISCELLANEOUS.

The railroad progress of China has been so fully discussed that it is unnecessary to allude to it, except briefly. The road from Shanghai to Woosung is progressing. The Germans are to build two roads in Shantung. The Belgians still cling to the Hankow-Peking line. Yung-wing hopes to construct a line from Tientsin to Chinkiang. The road from Tientsin to Paoting-fu is progressing. The line from Tientsin to Peking is paying expenses already. The Siberian road will go to Talienwan, and will have a branch to Peking. Other roads are in the air. Mining schemes are numerous. Much depends on whether the treaties are preserved and whether access is secured to all foreigners in Shantung and Manchuria, which Germany and Russia claim as their own sole preserves.

CHARLES DENBY,
PEKING, *April 3, 1898.* *Minister.*

FLAX IN INDIA.

In answer to an inquiry from a Chicago firm,* relative to the quantity of flax produced and exported from India, I would say that flax is grown in India exclusively for the seed. In no part of the country is the fiber produced. Experiments have been made for many years with the same result, viz, that it is no proof that a plant can be made to yield fiber because it can be grown in a country. Flax, hemp, and China grass are admirable examples of this fact. The possible area of fiber production of any one of these in India is extremely narrow.

Hemp yields fiber in Russia and other countries, and can not be made to produce the narcotic. In India the very reverse is the case, except in a small portion of the Himalayas, where it yields admirable fiber and no narcotic to speak of.

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* Advance Sheets of report have been sent to inquirer.

In some parts of the Punjab and Upper Sind flax is produced, but only for local purposes.

While large areas of flax are cultivated in almost every part of India and Burma, it is grown only for the seed, of which large quantities are exported, and not for the fiber; and there is no flax exported from India.

R. F. PATTERSON,
Consul-General.

CALCUTTA, *April 28, 1898.*

DECLINE OF BRITISH EXPORT TRADE: TIN-PLATE INDUSTRY.

From the Birmingham Daily Post of May 9, I select two commercial editorials, inclosing clippings of the same. These deal with a downward tendency of British export trade, which has been apparent for some months past. In the first editorial the decline in yarn, textile, hardware, cutlery, tin-plate, chemical, earthenware, and saddlery exports is shown to be due to the decrease in purchases for United States account. The Post says:

> Some of this shrinkage is presumably due to the disturbing effects of the war scare, but we are afraid that a good part of it must be ascribed to the effects of the Dingley tariff in discouraging imports of foreign manufactured goods.

The Post notes, however, that a curious feature of the returns for the last month is the large increase in British pig-iron exports to the United States, which was lately flooding British markets with Alabama pig. The British Iron and Coal Trades Review of this week, in its Manchester market report, says that "quotations for American pig iron have practically been withdrawn from this market, except in the highest grades." An American salesman tells me he has notified his Birmingham customers that he can not fill their orders for Alabama pig, owing to the inability of his American principals to find ships to carry it, except at impossible figures, eastward freight rates being abnormally high because of the big shipments of American wheat, while westward freight rates are low. The lowest rates for shipment of American pig iron to European markets are obtainable during the cotton-shipping season, as ships loaded with light-weight but bulky cotton need pig iron for ballast.

In the second editorial the Post treats the shrinkage of the tin-plate trade with the United States as the most conspicuous factor of the recent decline of the British export trade, but endeavors to rally the Welsh tin-plate manufacturers to renewed efforts for the American market, claiming that Welsh tin plate is superior to American, and believing that improved machinery would reduce the cost of manufacture sufficient to regain the American market. Concerning the statement that Welsh tin plate is superior, it is to be said that a confession of antiquated methods has usually coupled with it a claim to superiority of product. Improved machinery generally means American machinery, and, as the British workman has not taken kindly to new methods, its introduction for this industry might require, as it has for some other lines of manufacture, an importation of American workmen. In one factory in Birmingham there are employed about fifty American mechanics to operate American machinery, and many more are employed within the limits of this consular district; and it is worth while mentioning that several of these workmen have expressed themselves to me as dissatisfied with their food and lodging arrangements. They do not seem to adjust themselves in a happy way to the English manner of living.

As the Post's tin-plate statistics and ideas are derived from a paper read by Sir John Jenkins at the annual meeting of the British Iron Trade Association, I have obtained a copy and inclose it, together with a report, in condensed form, of the general discussion which followed its reading. It will be seen that the rosy views of Sir John and the Post of the possibility of recapturing the American tin-plate market are not concurred in by the members of the association.

It is interesting to note how much attention the United States receives in all the meetings of British manufacturers, and as a further illustration of this I inclose a few extracts from the report of the secretary and from the speech of the president at the meeting May 2 of the British Iron Trade Association. It will be seen that the British manufacturers have great respect for the United States system of CONSULAR REPORTS.

MARSHAL HALSTEAD,
Consul.

BIRMINGHAM, *May 17, 1898.*

DECREASE IN BRITISH EXPORTS.

[From the Birmingham Daily Post, May 9, 1898.]

The downward tendency which has been apparent in our export trade for some months past is very manifest in the trade and navigation returns for April, which we analyze to-day. The imports continue satisfactory in so far as they exhibit an increase upon the corresponding totals of a year ago, but there is ground for anxiety in the fact that the most noticeable increase is in duty-free provisions, which can not be regarded exactly as reproductive expenditure. The increase under this head for the month exceeds two and a half millions, or, say, 21 per cent, whilst for the four months expired of this year it is a little over six millions, or, say, 4 per cent. A more commendable feature is the increase of £2,306,000 ($11,222.149), or 43 per cent, in raw textile materials. Altogether, the month's imports exhibit an increase upon the corresponding month last year of £5,110,161 ($24,868,599), or 14½ per cent, whilst the four months' total yields an increase of over six and a half millions, or 4¼ per cent, the principal augmentation being in duty-free provisions. The na..onal export account does not improve on closer acquaintance. The decrease for the month is no less than £2,204,111 ($10,726,306), or 11.2 per cent, whilst for the four months it amounts to £3,795,180 ($18,469,233), or 4.8 per cent. Both for the shorter and the longer periods the contraction of business is very marked in yarns and textile goods, and especially linens, woolens, and worsteds. There is little change for the month in cotton goods, and for the four months the figures in this section are slightly ahead of those for the corresponding period last year, but the other textile branches alluded to appear to be doing very badly of late in the export department, and for this experience the depression in the United States market would seem to be chiefly responsible. Thus, our exports of linen goods to the States show a falling off for the four months of about £270,000 ($1,313,975), or more than 30 per cent; whilst our woolen and worsted exports to the same market during this period have decreased by £436,000 ($2,121,794), or over 80 per cent. Some of this shrinkage is presumably due to the disturbing effects of the war scare, but we are afraid that a good part of it must be ascribed to the effect of the Dingley tariff in discouraging imports of foreign manufactured goods. Next to yarns and textiles, the section exhibiting the greatest decrease for the month is metals and their manufactures. The shrinkage is principally in iron, and especially railroad iron, pig, wire, hoops and sheets, and tin plates. Galvanized sheets, we are gratified to note, maintain the improvement noted a month ago, though the increase is not sufficient to wipe out the falling off in the earlier part of the year. With India, Canada, Germany, Mexico, and some of the South American states, however, we have done an increased trade this year. A curious feature of the returns for last month is the large increase in our pig-iron exports to the United States, which was largely flooding our market with Alabama pig. Hardware and cutlery are still on the down grade. The decline last month was £28,585 ($139,109), or 15 per cent, attributable chiefly to the diminished requirements of the United States, South Africa, Australasia, British North America, and the leading continental markets. The improvement in our copper exports is unfortunately confined to the unwrought metal, though India is taking fairly of yellow metal. There is a small but welcome increase under the heads of machinery and mill work, though the adverse balance for the four months is still a considerable one, owing doubtless to the cramping effects of the engineers' strike. Our chemical trades appear to be still in a languid way, owing to the diminution of United States orders; but though our exports of firearms are falling off, there are substantial and significant increases this time under the heads of both gunpowder and other ammunition. There is a further increase of over 30 per cent this month in our cycle exports, and for the four months the decrease under this head amounts to £209,000 ($1,017,096), or 34 per cent. There is a drop also in railway wagons this time, but in all kinds of rolling stock we are still a long way ahead of last year. The United States appears to be mainly responsible for the decline in our earthenware and saddlery exports, but it is to be hoped that this adverse influence will cease to operate with the war.

LOSS OF TIN-PLATE TRADE.

[From the Birmingham Daily Post, May 9, 1898.]

A conspicuous factor of the decline which is lately apparent in our steel and iron exports is the continued shrinkage of our once valuable trade with the United States in tin plates. For the four months expired of this year the decrease, as compared with the corresponding period last year, amounts to £118,000 ($574,247), or, say, 10 per cent; and there is no reason to suppose that it has yet reached the bottom. On the contrary, all the evidence points to a further steady contraction of the trade from month to month, until the whole of it has passed into the hands of our American competitors. In view of this great and continued dislocation of business, it becomes important to inquire what is to become of the numerous and costly works erected in South Wales and the many thousands of hands dependent upon them? Unless the protected American competition can be successfully met, it is evident that our tin-plate makers must either find new markets for their wares or turn their attention to some other branch of manufacture. The latter alternative is of the desperate order which few manufacturers care to contemplate, except as a last resource. There remains the question of the possibility of fighting American competition with improved processes and appliances, whilst seeking new and more favorable markets for our products. On this subject it may be useful to refer to an interesting paper read by Sir John Jenkins at the meeting of the British Iron Trade Conference, on the position and prospects of the British tin-plate industry. The official estimate of our production of tin plates last year, including black plates, is about 450,000 tons, which was approximately the total for 1889. This means that, owing to the loss of our trade with the United States, our production has been thrown back about ten years, On the other hand, the output of tin plates in the United States rose last year about 45 per cent, to a total of 447,000,000 pounds, and it is still increasing. The average annual consumption of plates in the United States would seem to range of late years from 150,000,000 to 190,000,000 pounds. Up to the commencement of the present decade the whole of these plates were imported from South Wales; but since 1893, when the American imports of plates reached their maximum, there has been a rapid decline of the trade year by year, the minimum being reached in 1897, with a total of little more than 85,000 tons. Fortunately, our tin-plate manufacturers have been able to find a certain amount of compensation in other markets. With Australasia, for instance, we have doubled our trade in tin plates since 1890, with Germany we have more than doubled it in the same period, and with France the increase is no less than 151 per cent. Excluding the United States, the aggregate increase in our exports of tin plates to foreign and colonial markets between 1890 and 1897 represents 91 per cent. Unfortunately, the omission indicated is very much like that of the Prince of Denmark in "Hamlet," for up to a few years ago the United States alone took more than three-fourths of our total tin-plate exports. It is evident, therefore, that, however successful our manufacturers may be in pushing their trade in other markets, they can not hope to make up in this way for the loss in the American market for very many years to come. We should be sorry to say anything to discourage them from seeking new outlets for their goods in other markets. There is still, doubtless, much scope for the development of their business in this way, more particularly in the Australian colonies and South America. But the great market of the present is unquestionably the United States, and we think that a good deal is still possible in the way of retaining and extending our hold upon that market. In the first place, it must be borne in mind that British tin plates are superior in quality to the American-made article, and command a higher price. In the next place, we can deliver them on the Pacific coast in spite of the tariff, at a lower price than tin plates of American manufacture, which have to be transported thither by rail. Even at New Orleans the difference in favor of American-made plates is only 8d. (16 cents) a box. A very little reduction in the cost of manufacture through improved mechanism, a larger output, or a freer labor system, ought, one would think, enable us to remove this small discrepancy, in which case a vast and valuable market would again be open to our tin-plate manufacturers. American labor is admittedly dearer than ours, and the American tinning process is not so good. It is only the protective tariff which enables the American tin-plate manufacturers to live; and the advantages of that tariff might be counteracted or materially reduced at any moment by a rise in the cost either of labor or steel. Anyhow, we hope that our manufacturers will not be prematurely disheartened or abandon the struggle for a footing in the American market, until they have exhausted the resources of metallurgical science and industry.

ON THE POSITION AND PROSPECTS OF THE TIN-PLATE INDUSTRY.

[Paper read by Sir John J. Jenkins, M. P., before the British Iron Trade Association.]

The total production of tin plates in this country, including black plates, is estimated by Mr. C. B. Brooke at about 450,000 tons for the year 1897. This means that, with the loss of the United States business, so far as it has gone, the trade has been thrown back about ten years. In other words, we stand to-day much where we did about ten years ago. We must no doubt look forward to losing more of the trade of the United States, although we may succeed in keeping a share of the trade of the Pacific States and of the drawback plates. We may even not fall much farther behind than we have already done. On the other hand, it is not to be overlooked that the American tin-plate manufacturers are making efforts to capture the South American and Canadian markets.

In the United States, the total production of tin plates for the year ended June 30, 1897, is computed at about 447,000,000 pounds, of which about 88 per cent was of the class weighing lighter than 63 pounds per 100 square feet. This is an increase of 45 per cent on the output of the previous year. During the same period the exports were 139,250,000 pounds and the imports about 244,500,000 pounds. The capacity of the mills completed and in course of construction at midsummer, 1897, was computed at 650,000,000 pounds. The American output of black plates for the year was 436,500,000 pounds, an increase in twelve months of about 102,500,000 pounds.

In speaking of the American market, we are apt to forget that it is only of comparatively recent years that it has assumed such large dimensions. In 1870, which is only twenty-eight years ago, the total quantity of tin plates shipped to the United States—which was practically their whole consumption—amounted to only 75,372 tons. In that year our total exports of tin plates amounted to only 100,076 tons, or just 14 per cent more than the increased demand by other markets than the United States between 1890 and 1897. These figures do not include black plates, a recently developed branch of the trade, which would make them look much more favorable by raising our total export in 1897 to 330,632 tons, which is considerably more than three times our total export in 1870, and 11 per cent more than our total export in so recent a year as 1885. The following table compares the years 1890 and 1897:

Exports of tin plates from the United Kingdom in 1890 and 1897.

Country.	1890.	1897.	Increase.	
	Tons.	*Tons.*	*Tons.*	*Per cent.*
Russia	22,736	30,924	8,188	36
Germany	5,478	11,285	5,807	107
Holland	4,414	8,697	4,283	97
France	5,536	13,896	8,360	151
United States	318,108	85,475	....	....
Australasia	6,117	12,252	6,135	100
British North America	16,127	21,863	5,736	35
Other countries	40,509	87,517	47,008	116
Total	419,025	271,909	146,816	....
Increase, disregarding United States	....	....	85,517	91

A similar increase during the next seven years would leave us in as good a position as we hold to-day, even if the American market were absolutely blotted out. It will probably, however, never come to that, mainly because we have the prospect of continuing to hold a large share of the trade of the Pacific coast and of maintaining a demand on rebate plates and plates of special quality.

The importation of tin plates into the United States from Great Britain has naturally been affected in a measure corresponding to the growth of the American industry. A recent diplomatic report has pointed out that during the four years preceding the passage of the McKinley act the importation of British plates averaged some 650,000,000 pounds. In 1891, in prevision of the raised duty under the McKinley tariff, it was much in excess of that average, and the following year showed a correspondingly large falling off. During the four years, however, ending June, 1893 to 1896, the importation rapidly declined, thus:

	Pounds.
Year ending June, 1893	628,425,902
Year ending June, 1894	454,160,826
Year ending June, 1895	508,038,938
Year ending June, 1896	385,138,983

In April of last year there were in the United States thirty-nine tin-plate works, of which four were not working and not likely to resume operations. The others had 180 mills, of which 170 were then working. At the same date it was stated that 11 new mills were in course of construction. It was estimated that these 191 mills had a capacity of 6,250,000 boxes, which would be almost equal to the total annual consumption of the United States, although the actual American production was only estimated at something over 4,000,000 boxes annually.

Her Majesty's consul at Philadelphia reported in 1897 that out of a total capacity in the United States of 175 hot mills for the turning out of black plate for tinning purposes, Pennsylvania had 64 in June last, which represented some of the largest, best equipped, and most successfully operated tin-plate plants of any country. All the tin-plate works in that State, with the exception of two plants, were then new works constructed on the most approved plan since the enactment of the McKinley law, while the works of two older establishments had been so remodeled as to conform to the standard of more modern plants.

So far as the technology of the tin-plate industry is concerned, although this is hardly the place to discuss such details, it may be remarked that the American manufacturers have adopted what is known as the single stand of hot rolls, and claim that their mills are more substantially built, with much stronger foundations, and housings and rolls much heavier, their standard housings weighing about 11 tons. The rolls used are from 22 to 24 inches in diameter, with neck of 18 to 19 inches in diameter. It is said that much heavier work is therefore accomplished in American mills, where nearly all packs are usually rolled 20 by 56 inches, and cut in two 20 by 28 inches.

Several points in the new competition of the United States appear to be worthy of consideration. There is, for example, the remarkable cooperation of the railway and steamship companies, which assist makers by liberal rebates, recouping themselves out of the high charges of the home market and by facilities similar to those enjoyed by Germans, but which are not obtainable in England. It is possible for an American manufacturer in almost any city in the United States to obtain a through rate of freight and bill of lading. In this way matters are much simplified, as there is only one ascertained charge to consider, whereas in purchasing goods in England there are the items of railway carriage, dock dues, and sundry charges, besides steamer freight. This is a valuable privilege; but, in addition, such low rates are quoted for large quantities that goods are actually conveyed two-thirds of the way across the continent, and thence to Japan by steamer, for less money than by the sea route from Liverpool or Glasgow.

A recent writer has pointed out that American makers have also, as a rule, adopted the practice of quoting for their goods "packed free on board New York," whereas the British prices are almost always subject to the addition of packing charges, which can rarely be estimated as closely as competition demands, and are consequently very unsatisfactory, so far as the buyer is concerned.

To enable the American tin-plate manufacturers to obtain a footing in the Pacific markets, very low rates of freight—about 2s. 6d. (60 cents) per 100 pounds—have been given them. This market now consumes about 54,000,000 pounds of imported plates, and about 5,000,000 pounds more have been shipped to the Gulf ports for the cotton-seed oil, fruit, and oyster industries.

Of the 280,000,000 pounds of tin plates imported at Atlantic ports in 1896, it was computed that probably over a third (some 100,000,000 pounds) were "drawback" plates, *i. e.*, intended to be used in making oil and fruit cans, etc., and afterwards reexported with a rebate of 99 per cent of the duty. The Standard Oil Company, which almost entirely controls the oil trade of the whole country, makes all its cans for export at New York and Philadelphia. The plates imported for local consumption were in part special brands which have become known in the United States as well suited for particular purposes, such as the Siemens plates, which have been found, it seems, more suitable for deep stamping than the American plates, and certain brands of high-grade roofing tins.

Tin plates are made use of in the United States to a very considerable extent for roofing purposes, instead of the galvanized plates which are more commonly supplied and used by European countries. It is probable, indeed, that this purpose absorbs a larger volume of tin plates than any other. The next largest requirements are the oil, the canned-meat, and the canned-fruit industries. The petroleum industry is chiefly carried on in Pennsylvania; the largest meat-canning centers in Kansas City, Chicago, Omaha, St. Louis, and St. Joseph; and the largest fruit-growing regions are on the Pacific coast. Eleven of the largest American works are in Philadelphia; nine are in Ohio, the second largest oil-producing State; six are in Indiana, chiefly within the gas belt; and there is one each in St. Louis and Chicago. As yet there are no tin-plate works on the Pacific coast.

A recent writer calls attention to the recent developments in the tin-plate industry in the following terms:

"Two interesting features in the present condition of the tin-plate trade call for some remark. The first is the recent invasion by American producers, who, not content with making the tin plates, which, until lately, they bought in England, are now actually selling steel to tin-plate makers in Wales. Buyers of tin plates have little reason to regret this new competition, however much chagrin it may cause the Welsh steel makers. Of course, no direct profit results to the American producers, who will no doubt cease their operations on this side as soon as the internal trade of the States revives. But this importation, as well as similar ones from Germany, forms a striking instance of reaction in trade. The other point of interest is the remarkable increase in the exports of tin plates to nearly all foreign countries (excepting the United States). During the last ten years an important trade with Russia has sprung up, shipments from the United Kingdom to France and Germany have about trebled, and to Holland, Portugal, and Australasia have doubled; the total exports being now far in excess of the total in 1880. To this may be added a very large and increasing trade in black plate, amounting to 48,414 tons in 1896."

According to Mr. O'Beirne, one of the secretaries of the British embassy at Washington, it appears to have been demonstrated that for household or hard usages the British tin plates outlast the American product. It is true, the British plate is not quite so bright, but it is far more durable, has a more substantial body, is more evenly rolled, does not aggravate the tin-working machines, on account of its smooth body, and does not rust so quickly. For tinning purposes the American product is said to be as good as the British, but the latter is preferable at equal prices. American tin plate is brighter in color, but it has not that working body; as a rule, the coating is not so evenly run, and does not make up so even and smooth as the British article. Very little tin is used for local purposes.

Some interesting figures as to the cost of producing tin plates in the United States were recently presented through the Pennsylvania State Bureau of Statistics, and may therefore be regarded as official. These figures showed that ten works in the State of Pennsylvania produced a total of 49,502,000 pounds of tin and terne plates, of a total value of $1,774,324, or £365,000; while they also produced 63,615,360 pounds of black plate, which was not tinned, of a total value of $1,677,170, or £344,800. The works as a whole employed 2,574 persons, whose aggregate wages were $1,161,425, or £237,000; being an average of $1.88, or 7s. 10d., per day. It will be noted that each employee produced on an average, of both descriptions, about 44,000 pounds, or, say, 20 tons of plates per annum, and that the wage cost of such production was about £4 15s. ($23.12) per ton. If, however, the whole product had been tinned, the average wage cost would have been much higher, as there is a difference of $17.95, or, say, £3 12s., between the average value of black plates and that of plates which have been tinned. Moreover, the statistics show, as might be expected, that the average wages paid in the works devoted to the manufacture of black plates were considerably lower than those paid through the industry as a whole, being only $1.56 per day, against the general average already recorded of $1.88. The same State had in operation seventeen tin-dipping works, in which the average wages paid throughout were $1.38 per day, the average value of the finished product being $89.62 per net ton, a large part being described as high-grade roofing tin.

With two exceptions, all the tin-plate works in Pennsylvania have been built since the enactment of the McKinley law of 1890. They are well equipped, as a rule, and even the two oldest establishments have of late been remodeled, so as to conform to the latest progress. One of the Pennsylvania plants—that of the Newcastle Steel and Tin Plate Company—claims to have the largest number of hot mills in any one plant, and has an estimated annual capacity of 750,000 boxes of I. C. plates of 108 pounds each, or about 35,000 tons annually. Most of the dipping plants are situated in Allegheny County and in Philadelphia. At the former place, they obtain the cheap tin-plate bars made in Pittsburg and its neighborhood; in Philadelphia, they have to pay perhaps $1 per ton more for transport of the raw material; but, on the other hand, they are much nearer to New York.

The manufacture of tin plates, like practically all the other industries on the metallurgical list, may be said to consist of the following categories:

(1) Cost of raw materials, which in this case are bars, tin, etc.
(2) Cost of labor.
(3) Cost of transport.
(4) Cost and character of equipment and depreciation thereon.

In regard to the cost of labor, there is sufficient evidence to show that the nominal range of wages in the United States is much higher than in South Wales. The difference, in point of fact, is very materially against the United States. This is naturally a most important consideration. The cost of the steel bar per ton of tin plates produced will not represent more than £3 10s. to £4 ($17.03 to $19.47), and the difference between that figure and the selling price of the finished plates is not likely to be less than £5 ($24.37) per ton, of which the greater part is made up of labor. I do not venture, offhand, to state the amount of the difference in this labor cost between the two countries; but it must be obvious that if it is 20 or 30 per cent, as it probably is, this must be attended with great advantage to the Welsh makers, all other things being equal.

This raises the question, How far are the other things equal? We know that the cost of tin-plate bars has recently been somewhat lower in the United States, but the difference is not serious, and is certainly small when compared with the difference in the nominal wages paid to labor. On the other hand, we have home supplies of tin and probably a good deal better facilities for importing tin from the Straits Settlements and elsewhere.

The character of our equipment in this country leaves in some cases something to be desired, compared with the newer plants built in America. Nevertheless, some of our more modern plants are fully up to date, and the figures given at the beginning of my paper suggest the necessity and encourage the expediency of doing as much as we can in this direction. Even if we should be compelled to vacate the United States markets entirely, we have all the rest of the world for our field of operations; and with our experience, our high reputation, our valuable connections, and our skilled labor, it is not likely that any other country will run us a close race in neutral markets for at least years to come.

So far as the cost of transport is concerned, Mr. O'Beirne has calculated that British plates can be landed, approximately—

At points on Atlantic coast for $3.88, or 28 cents (1s. 2d.) above price of American plates there.

At Pacific ports for $3.84, or 22¼ cents (11d.) below price of American plates there.

At Chicago for $3.88, or over 30 cents (1s. 3d.) above price of Indiana-made tin plates there.

At New Orleans for $3.81, or 16 cents (8d.) above price of Indiana plates there.

The American tin-plate industry is wholly dependent for its raw tin material on foreign importation. Of the total 50,000,000 pounds of tin in boxes, bars, etc., imported in 1896, nearly 45,000,000 pounds was furnished by Great Britain, Australasia, and British East Indies. An effort was made at the time of the passage of the McKinley tariff to foster tin mining in the United States by imposing a 4-cent per pound duty on imports. The attempt has not, however, proved successful, no tin having been produced in the past four years from any of the deposits of tin in the United States, viz, South Riverside, Cal.; the Black Hills of South Dakota; the Cash Mine, in Rockbridge County, Va.; and at King's Mansion, N. C.

The United States has begun to export tin plates, and in the fiscal year ending June 30, 1896, shipped as much as 1,800,000 pounds. It is, however, stated that these plates, which were for the most part shipped to Canada, were British plates that had been reexported, with the benefit of drawbacks, mostly from San Francisco and Boston, and that if the rebate were abolished they would be likely to be exported to Canada direct from South Wales.

One of the most hopeful fields in which the tin-plate manufacturers of this country could possibly work would be that of the introduction of canned fruits, meats, and vegetables from other countries than the United States. Why, for instance, should we not do more than we have hitherto done in the way of seeking to open up a trade with some of our own colonies, and especially with Australasia and India, which could do a great deal more than is now done to develop a market for tin plates? This missionary work would, of course, call for some expenditure; but it need not be very large, and it would be likely to be well repaid. Perhaps the best way of proceeding would first be to send out some competent representatives to find out what is possible in the way of developing a market, and then offering special terms to likely persons.

DISCUSSION OF SIR JOHN JENKINS' PAPER.

The president said the paper contained most valuable figures, and to himself it was particularly interesting, because it was the trade in which he was reared and in which he was still to a small extent concerned. He had always been a strong believer in American competition in the tin-plate trade, because he had seen the carpet trade introduced into the United States, and he had lived to see American carpets sold in Birmingham in large quantities; and when American competition came in, he was afraid it always came to stay. At the same time, South Wales still had command of the neutral markets of the world, and he hoped that they would still have great success and profit in that industry.

Mr. C. B. Brooke, in seconding the resolution, said that he could not take as rosy a view as Sir John Jenkins had done. He had spent two months in America last year, and had made inquiries into the trade generally, and he found that steel bars did not cost so much as £4 ($19.47) per ton. The steel bar could be delivered at the various points adjacent to where it was made at something like 64s. ($15.57) per ton. The cost of labor in the mills of America was greater than in this country, and in the tin department it was less; but even the additional wages paid were to some extent neutralized by the additional output. There were no trades-union restrictions whatever. They used stronger housings and mills, but they would bear more work than those in this country. The men were allowed to take helpers, and they paid them, and that enabled the men on the pay sheets to turn out more work than they otherwise would do. All these things served to economize, and every day men in different departments endeavored to improve the machinery. They might put down machinery, and before a month was out it would be altered, and they would then put down fresh machinery in order to reach as near perfection as possible. The mechanical ingenuity of the Americans was great, and he would not be surprised if they brought about a revolution in rolling bars and plates. Two or three of the ablest men of that country were giving attention to it. Their tin cost less; they made distinctions between the different classes of plates; and they were never troubled with trades-union regulations. The men were there to work, and if they did not do their work they had to step down for someone that would.

Mr. Jeremiah Head, in supporting the vote, said that, having had the control of steel works in North America, he knew a little about those things, although not especially in the tin-plate trade. With regard to boiler and bridge plates, he might say that the prices at which those were being sold in the United States were about 10s. ($2.43) per ton cheaper than in the Cleveland district in England, and, inasmuch as there was more labor in the production of thin sheets, he had no doubt that the price was a little greater. The raw steel was cheaper there than in England; otherwise it could not enter, as it did last year, to the extent of 28,000 tons. He believed, as compared with the steel in South Wales, it analyzed just the same, but there was double the phosphorus; but he believed that for most purposes that had been found not to affect the quality very much. Then, again, in Pittsburg the price of coke was not half what it was in the furnaces in the Cleveland district, and coal was about half also. Then, with regard to labor, it had been said in the paper that the cost of labor was very much greater than in England. But Mr. Brooke told them that that depended upon the class of labor and upon circumstances. He himself had not found it so very much greater. He had occasion to study the cost of setting to work some blast furnaces in Pennsylvania, and the average price per man for some years past was under 4s. (97 cents). That was not much greater than Sir Alfred Hickman himself paid.

Sir Alfred Hickman: It is less.

Mr. Jeremiah Head: The president said we ought to think twice before we turned to scrap a good deal of our machinery.

The President: I did not say we ought to.

Mr. Jeremiah Head continued that one thing to be learned was, that if it were not the best machinery, it should go to the scrap heap. It was that want of hesitation to send to the scrap heap that had made competitors win of late. One reason why labor in America was not so dear was that the men did not mind competing with one another, and they rather gloried in how much they could turn out in a day, instead of how little. One thing that made that possible was the large number of nationalities in the iron and steel trades, who practically had no sympathy with one another. It should be remembered that there were a quarter of a million persons emigrating from Europe every year to America, Those were mainly the working classes, and they came from all countries of Europe. There was a sufficient number of nationalities to enable a gang of one country to compete with a gang of another country, and so on, and the employer could keep them competing to a certain extent. What would happen during British trades-union interferences and big strikes if they had a quarter of a million working population coming in every year? It would entirely change the basis. But if a single cargo of Germans or Scandinavians were to be brought into England, what a fuss there would be. That gave competitors on the other side of the water an enormous advantage. There was one advantage which the British held, and which ought to be cultivated, namely, the control of the steamship lines and the postal and telegraph services; and there were the banking facilities, which were of the greatest importance. The speaker was particularly interested in what Sir John Jenkins said about the cultivation and fostering of trades in tinned provisions and fruits, and so on, in British colonies. He thought it was ridiculous that tin canisters and tin cans containing foods of all sorts should be imported even from as far as California. Probably the tin out of which these canisters were made had originally come from England. Yet they had colonies all over the world with climates as good as California and with rivers full of fishes. If that kind of trade could be obtained, it was greatly to the advantage of South Wales that it should be promoted. He did not think it should be left to them alone to bear the expense; it was a thing for the whole country.

Sir Alfred Hickman remarked that Mr. Head had said with great truth that the American tin-plate bars contained about double the phosphorus of those made in South Wales, but he said that they were suitable for most purposes. They were quite suitable for making thin sheets; but he could emphatically deny that they were suitable for most purposes, for when tin-plate bars were delivered in Wolverhampton on a large scale, it would have answered his purpose to have bought them and rolled them down to other sorts of iron and steel, but he found that they would not suit the purposes of his trade. There was another thing mentioned by Mr. Head, and that was the circumstance of lines of steamers starting from this country, which would be a great advantage; but, instead of being a great advantage, under the present monopoly system it was a great disadvantage. Traders found themselves handicapped by the combination of steamship owners keeping up the rates in this country and carrying at less rates from foreign ports, in order to compete with foreigners.

Mr. Brooke observed that the reason why American bars suited tin-plate purposes, in spite of the amount of phosphorus they contained, was that they were rich in manganese. As regarded the steamship accommodation, the tin plates were carried to America and delivered at the same rate of freight that they were brought from New York to London.

Mr. Snelus asked if manganese was an advantage in tin plates. He had some experience in tin plates at West Cumberland, and he had a good deal of difficulty with them, particularly when he found that they were pitted in the dipping; and he thought he traced the trouble to the manganese, which was more easily dissolved than the iron.

Mr. Brooke: The advantage of the manganese is only for counteracting the phosphorus.

Sir John Jenkins, in reply, said, with regard to the price of bars, he had taken that from the quotations in the American papers for his guide, and not perhaps as the actual selling price; £4 ($19.47) per ton was the price quoted. He knew that American bars had been sold rather under £4 ($19.47) per ton; but he was told that they were sending their surplus to England, which enabled them to turn out their usual quantity of work, and that surplus they could afford to sell at a price less than they were getting for their bars in America. He had been looking over the yields of some of the largest mills in America. They turned out a very much larger amount of work than the British did, because they first of all rolled out the bar iron, and then another piece, and they lashed those pieces together; in fact, they had a different way of working. Those practically acquainted with the trade would understand that it was not always easy to get those pieces heated uniformly, and therefore they did not bring the two pieces to the exact size; consequently, the yield in America was not anything like so good on that account. They turned out a larger quantity, but it was at the cost of the material. It was said that before very long the mills in England would be altered to the American system. Well, the most successful works in America did their work on the same lines as the British did. They turned out less in quantity, but still it compared favorably in quality. He was glad that Mr. Snelus had mentioned the excess of manganese, for in his own practice for a long time they could not find out what was the matter; and it was found that the unevenness arose from an excessive quantity of manganese. He quite agreed with the remark of the president, that once America entered into any trade that competed with the British, they generally did so successfully. Therefore, it behooved them to do all that they could to further economize and to produce plates at as cheap a rate as possible. That was a doctrine that he had often preached to employers in South Wales, and to the workmen also. They had endeavored to send missionaries to different parts of the world to teach the people to use tin plates; but they found that while a few manufacturers would contribute to the success of the mission, others waited to see what effect the work would have on those who had to put their hands into their pockets. The figures he had quoted in his paper showed that although they had lost the American trade, their gain in other places was very rapid. He was not at all afraid that America would compete in those places for some years to come. Therefore, looking at the figures in the early part of his paper, he thought they were very encouraging, and that the trade was in a healthy condition in comparison with other trades of the world.

APPRECIATION OF AMERICAN MANUFACTURING METHODS AND EXCELLENCE OF UNITED STATES CONSULAR SERVICE.

[Extracts from report of the board of management to the annual meeting and conference of the British Iron Trade Association for 1897.]

America and other foreign competition.

Reference was made in the last annual report of the board to the progress that had been made in the competition of the United States. This competition has continued throughout the whole of the past year, and has led to the importation into our home market of nearly 100,000 tons of American pig iron and about 28,000 tons of blooms, billets, or finished steel in various forms.

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Trade unity and foreign competition.

The board of management is satisfied that the increasing severity of foreign competition renders the work of the association more than ever necessary, and offers to it a much wider and ever-increasing field of usefulness.

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Our keenest rivals, it may be added, excel in strength and vigor and aggressiveness of their trade associations. This is more especially true of Germany, Belgium, and the United States. Our own trade can hardly hope to be equally vigorous if it neglects to adopt the means which have been so largely instrumental in giving success to our ever-watchful rivals.

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Extracts from the president's address.

It is perhaps presumptuous for a layman to offer an opinion on railway management, but it does seem to me that in this country we do not enjoy the same advantages as some of our foreign competitors. This country is handicapped to some extent, and always must be, by the high initial cost of our railways, which, I am told, is more than three times that of the system of the United States and more than twice that of the system of Europe. We have also to bear in mind that our railway companies are guaranteed a virtual monopoly by Parliament, on the faith of which the capital has been subscribed. That capital represents an enormous sum—some twelve hundred millions being sunk in our railways and some forty millions in our canals. On the Continent, speaking generally, the bulk of the railway and canal systems are controlled by the respective governments. As business men, acting on business principles, we could not support any legislation of a confiscating character; but that does not prevent us asking the question whether the railway companies have given all the help they should have done to the iron and steel industries. We think these trades have made possible many railway economies, and, if on no other grounds, are entitled to consideration. The board of management think that help might be given to our traders without any prejudice to the interests of the shareholders. There are two directions in which large economies seem possible—the construction and use of larger wagons for mineral traffic and the substitution of steel for timber in building rolling stock. We are all familiar with two other directions in which large economies have been and are being effected—the general substitution of steel for iron in the permanent way and the modern mechanical conditions involved in locomotive construction. What we as a trade ask is that we should have some share in the benefits which have accrued from these economies. We also think it is worthy of serious consideration whether specially low rates should not be granted for export, seeing that these are granted by continental lines to traders on their systems and especially by our great rival—Germany.

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Last session Parliament appointed a committee to consider the best means of bringing to the knowledge of traders the information furnished by our consuls and other agents upon the conditions of foreign markets and as to the opportunities afforded by them for the introduction and development of trade. This association was asked to submit evidence, and it was decided to ask the secretary to prepare and give such evidence on our behalf. To-day we have the good fortune to have a paper on the subject from Sir Edward Carbutt, than whom few are more competent to deal with this important matter. It is very doubtful whether British trade receives from our consuls the help that it should; but there is no doubt at all that the way in which our consular reports are presented is not nearly on the same level as to information and general arrangement as those issued by the United States Government.

Mr. Thwaite, to-day, in a paper that is of vast importance, will deal with the possible economies due to the utilization of the gases of the blast furnace for power production, and no doubt it will lead to valuable discussion. I may remind you that within the last few years much has been done in Scotland and elsewhere in recovering by-products of the blast furnace, and that recent results show an economy of about 5s. 6d. ($1.29) per ton of pig from this source, after providing for the cost of installation and labor. The British iron makers have often been found fault with for being behindhand with improvements and slow to adopt new methods. There is, however, something to be said on their behalf. We were first in the field, and to adopt new methods often involves great loss in writing off the values of existing plant. One wants to be very thoroughly convinced of the superiority of a new method before condemning as useless a large plant that has hitherto done good service. It must also be remembered that in the United States and in Germany a paying home trade is secured to the manufacturers by the tariff regulations of those countries. In addition, a protected home market renders possible a system of pools and syndicates for regulating prices, which with a policy of free imports, as we have in this country, can not be fully carried out. It is, therefore, quite natural that a steel maker in the United States, secure of a profit on a large portion of his output, should not hesitate to make capital outlay on his plant to an extent that would almost seem reckless to his English competitor.

A leading financial paper has recently spoken of a possibility of a pig-iron famine. This association, I am sure, does not concur in such a view. The resources for the manufacture of pig iron appear to be only limited by the possible supplies of iron ore. When we consider the enormous resources of the United States, as well as those of other countries, I must say the day of a pig-iron famine seems far off.

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I think it is worth the attention of this association whether steel is used as much as it might be in the building trade of this country. In the United States, as you know, the use of steel in buildings has made enormous strides in the course of the last few years. I am told that in this country the restrictions of our building acts preclude the same class of work being introduced. If that be the fact, the trade should, I think, take steps to have such restrictions removed.

KONGO TRADE IN 1897.

Under date of April 14 last, Mr. Van Estrelde, Secretary of State of the Kongo, submits his annual report for 1897 on the commercial situation of the Free State.

From this document it appears that the general foreign trade, imports and exports combined, amounted last year to nearly $7,913,000, of which $3,377,500 was in exports and $4,535,500 in imports. This total exceeds by about $2,000,000, or more than 31 per cent, the total for 1896.

In this total of nearly $7,913,000, the special trade (which includes only the exports of products produced within the boundaries of the Kongo and the imports of such foreign merchandise as is to be consumed in the country) figured for $7,237,500, to wit: Imports, $2,923,366.43; exports, $4,281,022.26. The figures for the special trade show an increase of more than 35 per cent over the total of 1896. They exceed by more than 140 per cent the amount of this special trade in 1893, showing that the commerce of the Belgian Kongo is now about two and one-half times as important as it was five years ago.

The development of the export trade is due in a large measure to the extension which the rubber traffic has experienced. In 1893 the custom-house authorities noted the exportation of 532,742 pounds of this article; in 1894, 745,718 pounds; in 1895, 1,271,220 pounds; in 1896, 2,904,748 pounds; last year it amounted to not less than 3,665,548 pounds.

The share of Belgium in the import trade materially increased during 1897; it forms 73 per cent of the total. Cotton textiles, as formerly, represented the greatest proportion of this increase; they amounted to $868,500 in value (being 11 per cent more than the figures of 1896), of which sum Belgium imported to the value of $617,600, or about 72 per cent. After textile goods, the principal Belgian merchandise imported into the Kongo consisted of food products, metal ware, brass ware, railway supplies, machinery, tools, clothing, hardware, engines, boats, glassware, and firearms. The quantity of spirits introduced again slightly decreased; in 1895 there were imported 387,172 gallons of alcohol, the following year the quantity decreased to 321,204 gallons, and last year it fell to 300,664 gallons, or 0.94 per cent of the total trade.

Side by side with the commercial development the public revenues are increasing. The real receipts of the State, that is to say, its normal resources—the royal subsidy, the advances of the Belgian Government, and all other extraordinary resources being deducted—amounted to about $1,772,388.48.

The following table shows the progress made by such normal revenues since 1886, indicating likewise the percentage of the expenses included in the budgets payable by and out of such income:

Year.	Amount of receipts.	Percentage of the disbursements.	Year.	Amount of receipts.	Percentage of the disbursements.
		Per cent.			*Per cent.*
1886	$14,401.85	4.87	1892	$289,985.40	31.75
1887	38,745.72	10.61	1893	350,772.68	33.4
1888	51,783.06	9.21	1894	435,944.15	33.25
1889	99,413.14	16.06	1895	694,800.00	47
1890	89,282.19	14.69	1896	1,136,268.97	56.83
1891	254,672.57	28.97	1897	1,772,388.48	68.21

It is seen at a glance that the Kongo is annually becoming more and more prosperous as a State, and at the present rate of progress will, within a few years, be entirely self-supporting.

HENRY C. MORRIS,
Consul.

GHENT, *May 3, 1898.*

GRANTS OF LAND IN THE KONGO FREE STATE.

I wish to supplement my report of November 26, 1897,* giving the conditions under which trade may be carried on and lands acquired in the Kongo Free State, and to report that the Government of that State has just given official notice, in its official bulletin of April, 1898, of a change in the regulations heretofore existing.

It is announced that, on account of the number of applications which have lately been made for the purchase of lands in the Upper Kongo, the Government has found it necessary to ascertain with exactitude what lands have been granted, and complete the survey of the same; and, until these formalities shall be finished (which can not be expected until some time in the year 1899), no new applications for grant of lands outside of villages will be considered in the territory of the Upper Kongo east of the River Lakunga, a feeder of Stanley Pool.

BELLAMY STORER,
Minister.

BRUSSELS, *May 7, 1898.*

TRADE-MARKS IN CAPE COLONY.

Consul-General Stowe sends from Cape Town, under date of April 19, 1898, the following printed copy of the trade-marks act, and of rules and regulations relating to the registration of trade-marks in Cape Colony, information in regard to which had been requested by a Rhode Island firm: †

ACT OF JULY 5, 1895.

A trade-mark must henceforth consist of or contain at least one of the following essential particulars:

(*a*) A name of an individual or firm printed, impressed, or woven in some particular and distinctive manner; or

(*b*) A written signature or copy of a written signature of the individual or firm applying for registration thereof as a trade-mark; or

(*c*) A distinctive device, mark, brand, heading, label, or ticket; or

(*d*) An invented word or invented words; or

(*e*) A word or words having no reference to the character or quality of the goods, and not being a geographical name.

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* See CONSULAR REPORTS No. 209, (February, 1898), p. 289.

† Advance Sheets of the report have been sent to the inquirer.

And there may be added to any one or more of these particulars any letters, words, or figures, or combination of letters, words, or figures, or of any of them, but the applicant for registration of any such additional matter must state in his application the essential particulars of the trade-mark, and must disclaim in his application any right to the exclusive use of the added matter. Provided as follows:

(1) A person need not under this section disclaim his own name or the foreign equivalent thereof, or his place of business, but no entry of any such name shall affect the right of any owner of the same name to use that name or the foreign equivalent thereof.

(2) Any special and distinctive word or words, letter, figure, or combination of letters or figures, or of letters and figures used as a trade-mark before the 8th day of August, 1877, may be registered as a trade-mark under the said act.

1. The rules promulgated by government notice No. 363, dated the 22d of April, 1890, are hereby repealed; provided that any act begun in accordance with the said rules before the taking effect of the amended rules, now published, may be accepted by the registrar of deeds if he think fit.

2. The fees specified in the first schedule hereto shall be payable to the registrar of deeds by means of revenue stamps.

3. For the purposes of trade-marks registration goods are classified in the manner appearing in the second schedule hereto. If any doubt arises as to what class any particular description of goods belongs, the doubt shall be determined by the registrar.

4. Every application for the registration of a trade-mark shall be in the following form:

To the Registrar of Deeds, Cape Town:

I (here insert full name and description of applicant), hereby apply for the registration of the following trade-mark, of which a representation is contained in the paper hereto annexed, namely: (here insert in writing a description of the trade-mark).

I desire that the said trade-mark may be registered in respect of (here insert description of the goods and the class or classes under which the applicant desires to have them registered), in the name of (here insert the full name, address, and business of the individual, firm, or company; in the case of an individual, add trading style, if any).

Dated at ——, this —— day of ——.
(Signed,)

(To be signed by the applicant; or in the case of a firm by a partner, adding "a member of the firm;" or in the case of a company by the secretary or other principal officer, adding "for the company.")

5. The application shall be accompanied by a solemn declaration to the following effect:

I (here insert full name and description), do hereby solemnly and sincerely declare—

1. That I am lawfully entitled to the use of the trade-mark described in the application hereto annexed, marked A, which is signed by me and is shown to me at the time of making this declaration.

2. *That the said trade-mark was used by me (or my firm or company, as the case may be), in respect of the goods in regard to which it is sought to be registered, for at least —— years before the 8th of August, 1877.

And I make this declaration conscientiously believing the same to be true.

Declared at ——, this —— day of ——.
Before me, ——.

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* This paragraph to be omitted if the mark was not used before the 8th of August, 1877.

The declaration, if made within the colony, shall be attested by a justice of the peace; if made elsewhere within Her Majesty's dominions, by a justice of the peace or mayor; and if made out of Her Majesty's dominions, by a British consular officer, or by a magistrate or mayor (whose signature shall be authenticated by such consular officer, or by the consular representative, in London, of the country in which the declaration was made), or by a commission of the supreme court of the Cape of Good Hope appointed to administer oaths outside this colony.

6. Any person desiring to register a trade-mark shall advertise his intention so to do once a week during two consecutive weeks in the Government Gazette and once a week during two consecutive weeks in a Cape Town newspaper to be approved of by the registrar of deeds.

7. The advertisement shall be in the following terms:

Trade-marks registration.

(Here give a clear representation of the trade-mark.)

I hereby give notice that I intend on and after the —— day of ——, 18 , to apply to the registrar of deeds to be registered as the proprietor of the trade-mark represented above, this day lodged and deposited by me in the office of the said registrar of deeds, in Cape Town, for inspection, according to the provisions of act No. 22 of 1877; and I desire that the said trade-mark shall be registered in respect of the following description of goods, that is to say (here insert class and description of goods).

Dated at —— , this —— day of —— , 18 .

(Signature of applicant, or his agent.)

8. At least thirty clear days must elapse between the date of the last advertisement of the application and the date on which application is made for the registration of the trade-mark.

9. Subject to any other directions that may be given by the registrar, all applications, notices, representations of marks, papers having representations affixed, or other documents filed with the registrar in connection with the registration of trade-marks, must be written on durable paper, of foolscap size, having on the left-hand side a margin of not less than 2 inches.

10. Subject to any other directions that may be given by the registrar, every application for registration must be accompanied by three plain and distinct representations of the trade-mark. If the mark is to be registered in more than one class, then two additional representations for each class after the first shall be supplied.

11. Whenever a mark consists of or includes words printed in other than Roman characters, there shall be given at the foot of each representation a translation of such words, signed by the applicant or his agent.

12. At the time of application for the registration of a mark the applicant shall lodge with the registrar of deeds copies of the newspaper in which his application appeared, and shall acquaint him with the dates of the Gazette in which it was published, and shall also lodge a form of certificate of registration having printed thereon a representation of the mark which it is his desire to register. Forms of such certificates shall be supplied by the registrar of deeds free of charge.

13. Any person objecting to the registration of a trade-mark must give notice in duplicate (signed by himself or his solicitor) to the registrar of deeds before the expiration of thirty days after the last advertisement of the application. Such person shall state the grounds of his objection and shall, before the expiration of thirty days, or such further time as the registrar of deeds may allow, after the date

of lodging his objection, proceed to have the application set aside by some competent court, failing which the opposition shall be deemed to be abandoned.

14. Where registration of a trade-mark has not been or shall not be completed within three months from the date upon which the application is received by the registrar of deeds, by reason of default on the part of the applicant, the application shall be deemed to be abandoned; provided that with regard to applications already lodged the three months shall be reckoned from the date of publication of this rule.

15. In case of the death of any appplicant for a trade-mark, the registrar of deeds may, on being satisfied of the applicant's death, enter on the register, in place of the name of such deceased applicant, the name, address, and description of the person owning the good will of the business, if such ownership be proved to his satisfaction. The mode of proof shall be by solemn declaration, attested as prescribed by No. 5 of these rules.

16. If the registered proprietor of a trade-mark send to the registrar of deeds notice of an alteration in his address, the registrar shall alter the register accordingly.

17. The registrar of deeds may, on request in writing, cancel the entry or part of the entry of a trade-mark on the register; provided that the applicant accompanies his request by a solemn declaration made by himself, stating his name, address, and calling, and that he is the person whose name appears on the register as the proprietor of the said trade-mark. Where a firm is the proprietor, the declaration shall be made by a member of the firm, and in the case of a company by the secretary or other principal officer. The declaration shall be attested in the manner prescribed in No. 5 of these rules.

18. The register of trade-marks and all documents in connection with the registration of trade-marks shall be open to the inspection of the public; and extracts from the register or copies of such documents obtained, on every business day during the hours that the office is open for the transaction of business.

19. The right to the use of a trade-mark is assignable by an instrument in writing, and such assignment of a trade-mark shall be recorded in the deeds office within three months of the date of its execution, after the expiration of which period it will not be received. The assignment shall be signed by the registered proprietor or by his lawful representative, whose signatures shall be authenticated in the manner provided by No. 5 of these rules with regard to the attestation of declarations, and shall contain full particulars of registration and assignment, as also the name, address, and calling of the person, firm, or company to whom the mark is assigned. The certificate of registration shall be produced for indorsement of such assignment. If it has been lost or destroyed, a declaration setting forth fully the circumstances of such loss or destruction, made by the registered proprietor and attested in the manner prescribed by No. 5 of these rules, shall be lodged with the registrar of deeds.

20. A certificate of registration of a trade-mark to be used in legal proceedings or for any other specified purpose will be issued upon application, but such certificate shall have specified on the face thereof the purpose for which it is issued.

21. At a time not being less than two months nor more than three months before the expiration of fourteen years from the date of the registration of a trade-mark, the registrar of deeds shall send notice to the registered proprietor that the trade-mark will be removed from the register unless the prescribed fee for the continuance of the mark be paid before the expiration of such fourteen years.

22. If such fee be not paid before the expiration of such fourteen years, the registrar of deeds may, after the end of three months from the expiration of such fourteen years, remove the mark from the register, and so from time to time at the expiration of every period of fourteen years; provided that if before the expiration

of the said three months the registered proprietor pays the said fee together with the additional prescribed fee, the registrar of deeds may, without removing such trade-mark from the register, accept the said fee as if it had been paid before the expiration of the said fourteen years.

23. Where, after the said three months, a trade-mark has been removed from the register for nonpayment of the prescribed fee, the registrar of deeds may, if satisfied that it is just so to do, restore such trade-mark to the register on payment of the prescribed additional fee.

24. Business with the deeds registry office should be conducted in person or through an agent, and not by correspondence.

FIRST SCHEDULE.

		s.	d.	
1. For every application to register one trade-mark for one or more articles included in one class	0	10	0	=$2.43
2. For every application to register more than one trade-mark for one or more articles included in one class, for each additional trade-mark after the first	0	5	0	= 1.21
3. For every application to register a trade-mark in respect of goods in different classes, for every class after the first to which such trade-mark is extended, an additional fee of	0	5	0	= 1.21
4. For the registration of a single trade-mark	2	0	0	= 9.73
5. Where the same person is registered at the same time for the same trade-mark in respect of goods in different classes, for the registration of one mark in each class after the first, an additional fee of	0	5	0	= 1.21
6. Where the same person is registered at the same time for more than one trade-mark, for one or more articles included in one class, for the registration of each additional mark after the first	1	0	0	= 4.86
7. For entering notice of opposition, for each trade-mark, whether in one or more classes	1	0	0	= 4.86
8. On every application to register a subsequent proprietor, in cases of assignment or transmission, the first mark	1	0	0	= 4.86
9. For every additional mark assigned or transmitted at the same time	0	5	0	= 1.21
10. For altering address in the register, for every mark	0	5	0	= 1.21
11. For every entry in the register of a rectification thereof, or an alteration therein, not otherwise charged	0	10	0	= 2.43
12. For continuance of mark at expiration of 14 years	1	0	0	= 4.86
13. Additional fee where fee is paid within three months after the expiration of 14 years	0	10	0	= 2.43
14. Additional fee for restoration of trade-mark when removed for nonpayment of fee	2	0	0	= 9.73
15. For certificate of registration to be used in legal proceedings or for any other specified purpose	1	0	0	= 4.86
16. For inspecting register, for every quarter of an hour	0	2	0	= .48
17. For inspecting documents lodged in connection with the registration of a trade-mark, for every mark	0	2	0	= .48
18. For extracts from the register or office copies of documents, first folio (of 100 words)	0	2	0	= .48
Every subsequent folio	0	1	0	= .24
19. For canceling the entry or part of the entry of a trade-mark, on the application of the owner of such mark	0	10	0	= 2.43

SECOND SCHEDULE.

General note.—Any wares made of mixed materials (for example, of both cotton and silk) shall be included in such one of the classes appropriated to those materials as the registrar may desire.

CLASSIFICATION OF .GOODS.

Note.—Goods are mentioned by way of illustration, and not as an exhaustive list of the contents of a class.

Class 1.—Chemical substances used in manufactures, photography, or philosophical research, and anticorrosives. Such as acids (including vegetable acids), alkalis, artists' colors, pigments, mineral dyes.

Class 2.—Chemical substances used for agricultural, horticultural, veterinary, and sanitary purposes. Such as artificial manure, cattle medicines, deodorizers, vermin destroyers.

Class 3.—Chemical substances prepared for use in medicine and pharmacy. Such as cod-liver oil, medicated articles, patent medicines, plasters, rhubarb.

Class 4.—Raw or partly prepared vegetable, animal, and mineral substances used in manufactures, not included in other classes. Such as resins, oils used in manufactures and not included in other classes, dyes (other than mineral), tanning substances, fibrous substances (*e. g.*, cotton, hemp, flax, jute), wool, silk, bristles, hair, feathers, cork, seeds, coal, coke, bone, sponge.

Class 5.—Unwrought and partly wrought metals used in manufacture. Such as iron and steel (pig or cast); iron, rough; iron, bar and rail, including rails for railways; iron, bolt and rod; iron, sheet, and boiler and armor plates; iron, hoop; lead, pig; lead, rolled; lead, sheet; wire, copper, zinc, gold, in ingots.

Class 6.—Machinery of all kinds, and parts of machinery, except agricultural and horticultural machines included in class 7. Such as steam engines, boilers, pneumatic machines, hydraulic machines, locomotives, sewing machines, weighing machines, machine tools, mining machinery, fire engines.

Class 7.—Agricultural and horticultural machinery, and parts of such machinery. Such as plows, drilling machines, reaping machines, thrashing machines, churns, cider presses, chaff cutters.

Class 8.—Philosophical instruments, scientific instruments, and apparatus for useful purposes. Instruments and apparatus for teaching. Such as mathematical instruments, gauges, logs, spectacles, educational appliances.

Class 9.—Musical instruments.

Class 10.—Horological instruments.

Class 11.—Instruments, apparatus, and contrivances, not medicated, for surgical or curative purposes, or in relation to the health of men or animals. Such as bandages, friction gloves, lancets, fleams, enemas.

Class 12.—Cutlery and edge tools. Such as knives, forks, scissors, shears, files, saws.

Class 13.—Metal goods not included in other classes. Such as anvils, keys, basins (metal), needles, hoes, shovels, corkscrews.

Class 14.—Goods of precious metals (including aluminium, nickel, britannia metal, etc.) and jewelry, and imitations of such goods and jewelry. Such as plate, clock cases and pencil cases of such metals, Sheffield and other plated goods, gilt and ormolu work.

Class 15.—Glass. Such as window and plate glass, painted glass, glass mosaic, glass beads.

Class 16.—Porcelain and earthenware. Such as china, stoneware, terra cotta, statuary porcelain, tiles, brick.

Class 17.—Manufactures from mineral and other substances for building or decoration. Such as cement, plaster, imitation marble, asphalt.

Class 18.—Engineering, architectural and building contrivances. Such as diving apparatus, warming apparatus, ventilating apparatus, filtering apparatus, lighting contrivances, drainage contrivances, electric and pneumatic bells.

Class 19.—Arms, ammunition, and stores not included in class 20. Such as cannon, small arms, fowling pieces, swords, shot and other projectiles, camp equipage, equipments.

Class 20.—Explosive substances. Such as gunpowder, gun cotton, dynamite, fog signals, percussion caps, fireworks, cartridges.

Class 21.—Naval architectural contrivances and naval equipments not included in classes 19 and 20. Such as boats, anchors, chain cables, rigging.

Class 22.—Carriages. Such as railway carriages, wagons, railway trucks, bicycles, bath chairs.

Class 23.—Cotton yarn and thread. Such as sewing cotton on spools or reels, sewing cotton not on spools or reels, dyed cotton yarns.

Class 24.—Cotton piece goods of all kinds. Such as cotton shirtings, long cloth.

Class 25.—Cotton goods not included in classes 23, 24, or 38. Such as cotton lace, cotton braids, cotton tapes.

Class 26.—Linen and hemp yarn and thread.

Class 27.—Linen and hemp piece goods.

Class 28.—Linen and hemp goods not included in classes 26, 27, and 50.

Class 29.—Jute yarns and tissues, and other articles made of jute not included in class 50.

Class 30.—Silk, spun, thrown, or sewing.

Class 31.—Silk piece goods.

Class 32.—Other silk goods not included in classes 30 and 31.

Class 33.—Yarns of wool, worsted, or hair.

Class 34.—Cloths and stuffs of wool, worsted, or hair.

Class 35.—Woolen and worsted and hair goods not included in classes 33 and 34.

Class 36.—Carpets, floor cloth, and oilcloth. Such as drugget, mats and matting, rugs.

Class 37.—Leather, skins unwrought and wrought, and articles made of leather not included in other classes. Such as saddlery, harness, whips, portmanteaus, furs.

Class 38.—Articles of clothing. Such as hats of all kinds, caps and bonnets, hosiery, gloves, boots and shoes, other ready-made clothing.

Class 39.—Paper (except paper hangings), stationery, and book binding. Such as envelopes, sealing wax, pens (except gold pens), ink, playing cards, blotting cases, copying presses.

Class 40.—Goods manufactured from india rubber and gutta-percha not included in other classes.

Class 41.—Furniture and upholstery. Such as paper hangings, papier-maché, mirrors, mattrasses.

Class 42.—Substances used as food, or as ingredients in food. Such as cereals, pulses, olive oil, hops, malt, dried fruits, tea, sago, salt, sugar, preserved meats, confectionery, oil cakes, pickles, vinegar, beer clarifiers.

Class 43.—Fermented liquors and spirits. Such as beer, cider, wine, whisky, liqueurs.

Class 44.—Mineral and aërated waters, natural and artificial, including ginger beer.

Class 45.—Tobacco, whether manufactured or unmanufactured.

Class 46.—Seeds for agricultural and horticultural purposes.

Class 47.—Candles, common soap, detergents; illuminating, heating, or lubricating oils; matches, and starch, blue, and other preparations for laundry purposes. Such as washing powders.

Class 48.—Perfumery (including toilet articles, preparations for the teeth and hair, and perfumed soap).

Class 49.—Games of all kinds and sporting articles not included in other classes. Such as billiard tables, roller skates, fishing nets and lines, toys.

Class 50.—Miscellaneous, including—

(1) Goods manufactured from ivory, bone, or wood, not included in other classes. Such as coopers' wares.

(2) Goods manufactured from straw or grass, not included in other classes.

(3) Goods manufactured from animal and vegetable substances, not included in other classes.

(4) Tobacco pipes.

(5) Umbrellas, walking sticks, brushes, and combs.

(6) Furniture cream, plate powder.

(7) Tarpaulins, tents, rick cloths, rope, twine.

(8) Buttons of all kinds, other than of precious metal or imitations thereof.

(9) Packing and hose of all kinds.

(10) Goods not included in the foregoing classes.

COLONIAL POSSESSIONS OF EUROPEAN STATES.

The extent of the German colonial possessions and protectorates, including the recently leased territory in Kyao-chau Bay, is 2,600,000 square kilometers (1,615,577 square miles). The German Empire proper contains only 540,657 square kilometers (335,931 square miles), which is not much more than one-fifth of its colonial possessions. Togo, Kameroons, and German Southwest Africa contain, together, 874,189 square miles. German East Africa is nearly two-thirds as large as the last named, having 584,777 square miles.

England's colonies and possessions embrace no less than 16,662,073 square miles, or more than eighty-five times as much as the Motherland.

A comparative table of the extent and number of inhabitants of the European colonial possessions shows:

Country.	Extent.		Population.	
	Motherland.	Colonies.	Motherland.	Colonies.
	Square miles.	*Square miles.*		
Great Britain	120,979	16,662,073	39,825,000	322,000,000
France	204,092	2,505,000	38,520,000	44,290,000
German Empire	208,830	1,615,577	53,325,000	7,450,000
Portugal	36,038	809,914	5,050,000	10,215,000
Holland	12,648	783,000	4,930,000	34,210,000
Spain	197,670	405,458	17,300,000	9,800,000
Italy	110,646	242,420	31,290,000	195,000
Denmark (Faroe Islands, Iceland, and Greenland)	15,289	86,614	2,175,000	130,000

Germany takes third place as regards extent of colonial territory, but only sixth in point of population of her possessions. Only Great Britain, France, Holland, and Portugal have more inhabitants in their colonial possessions and protectorates than there are at home.

THOS. EWING MOORE,
Commercial Agent.

WEIMAR, *May 11, 1898.*

THE DUTCH COLONIAL SYSTEM.

In view of recent developments on land and sea, I deem it proper to communicate some observations made to me by a subject of the Government of the Netherlands, qualified to speak on the topic of the Dutch rule in the Island of Java.

This important possession came into the hands of Holland late in the seventeenth century, and, thanks to a wise and benign administration, has been a source of strength to a nation which, though occupying only a small corner of Europe, boasts of subjects numbering about 40,000,000. While the civil government of Java is conducted on principles of liberty, peace, and progress, the net annual revenue of the colony may be stated at 35,000,000 guilders, or about $14,000,000, after paying all expenses, including the maintenance of an army of 20,000 men called into service to repress piracy and brigandage.

The native population is densely ignorant and full of caste and religious prejudices. The effort of the Government is to educate and elevate these people, without, however, outraging their racial instincts. To accomplish this end, the Dutch Government retains the native sultans and chiefs, supplies them with a gorgeous retinue, and surrounds them with every sign of pomp and power. Thus securing them upon otherwise precarious thrones, the paternal hand obtains in return faithful subserviency, and the unconspicuous but all-powerful master of the situation rules without revolt, and at the same time sows the seeds of education and reform, which gradually ripen and bear fruit. My informant said:

> We Dutchmen in Java move like a drop of oil—very, very slowly, but all the time moving—and by and by, when something is accomplished, it has come about so gradually that nobody knows how it happened. We pay the native priests, we support a large native police force, and we rule by the hands and mouths of the natives; but all the time we have our own people on guard, and no important move is made without our consent. Thus the people and their chiefs are contented and happy, and we keep them so by maintaining a condition more favorable than they could hope to maintain themselves.
>
> We encourage a healthy morale by permitting native and European soldiery to marry and live together in families, and we never send a Dutch official to the colonies unless he is endowed with qualities likely to improve the condition of things.

All our officials must work, and work hard. The improved condition of the natives over their fellows elsewhere shows what can be done. Eventually the entire colony will be ripe for similar government.

The profitable side of the account is traceable to the operations of the Netherlands Trading Company, which is only another name for the Dutch Government. This company actually plants crops, manufactures, and sells on lands held by the Government. The Government at home operates as a planter and merchant, and its immense net income is the product of legitimate toil and enterprise, and not of burdensome taxation. We succeed among strange people because we do more for them than they can do for themselves, and any other scheme of colonization is bound to end in failure.

ROBERT P. SKINNER,
Consul.

MARSEILLES, *May 11, 1898.*

FRENCH DUTY ON FLOUR AND BREAD REDUCED.

Referring to my report of May 4 in regard to the temporary removal of duties on wheat in France,* I now have to state that, as a result of such reduction in the duties on wheat, the French Government has made a similar reduction of the import duties on flour and bread.

The text of the decree herein referred to and dated May 4, 1898, is herewith transmitted, together with the translation of the same.

JOHN K. GOWDY,
Consul-General.

PARIS, *May 10, 1898.*

[Translation.]

The President of the French Republic, upon the report of the Minister of Commerce, of Industry, of Posts, and Telegraphs, and according to similar advice from the president of the council of ministers and also of the Minister of Finance,

Considering article 1 of the law of March 29, 1887,

Considering article 1 of the law of January 11, 1892, and article 14 of the same law thus worded:

"Whenever, owing to the enforcement of article 1 of the law of March 29, 1887, or owing to the enforcement of a special law, the duty on wheat shall be reduced, the duties on flour and on bread shall bear a proportionate reduction;"

Considering article 1 of the law of February 27, 1894,

Considering the decree of May 3, 1898,

Decrees:

ARTICLE 1. From and after May 5, 1898, inclusive, to July 1, 1898, exclusive, the import duties on flour of wheat, of spelt, and of flour of rye and wheat mixed (méteil), and on bread, are reduced to the following rates, viz:

No. 68.—Wheat, spelt, rye, and wheat mixed (méteil): Crushed grains, etc., containing more than 10 per cent of flour, 1 franc (19.3 cents) per 100 kilograms (220.46 pounds); flour at the rate of extraction of 70 per cent and above, 1 franc (19.3 cents)

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*See *ante*, p. 392.

per 100 kilograms (220.46 pounds); flour at the rate of extraction between 70 and 60 per cent, 1.85 francs (35.7 cents) per 100 kilograms (220.46 pounds); flour at the rate of extraction of 60 per cent and below, 2 francs (38.6 cents) per 100 kilograms (220.46 pounds).

No. 75.—Bread, 1 franc (19.3 cents) per 100 kilograms (220.46 pounds).

ART. 2. At the expiration of this period, the duties provided for by the law of February 27, 1894, shall be collected in full.

ART. 3. The President of the Council, Minister of Agriculture; the Miinster of Commerce, of Industry, of Posts, and Telegraphs, and the Minister of Finance are charged, each as to that which concerns him, with the execution of the present decree, which shall be inserted in the Bulletin des Lois and published in the Journal Officiel.

Done at Paris this 4th day of May, 1898.

FÉLIX FAURE.

AMERICAN FRUIT AND PLANTS PROHIBITED IN AUSTRIA.

I transmit herewith an extract from the Wiener Zeitung (recognized official organ in Austria) of April 20, 1898, with reference to the importation from America of fresh fruits, live plants, and materials having been used in packing the same. I also inclose a correct translation of said article.

HUGO DONZELMANN,
Consul.

PRAGUE, *April 27, 1898.*

PROCLAMATION BY THE MINISTERS OF AGRICULTURE, OF THE INTERIOR, OF FINANCE, AND OF COMMERCE, OF APRIL 20, 1898, CONCERNING THE PROHIBITION OF THE IMPORTATION FROM AMERICA OF LIVE PLANTS AND OF FRESH FRUIT INFECTED WITH THE SAN JOSÉ SCALE.

To prevent the introduction of the San José scale (*Aspidiotus perniciosus*) from America, it is hereby, upon an understanding with the Government of Hungary, ordered as follows:

SECTION 1. The importation from America of live plants, cuttings, seedlings, and refuse from fresh plants of any kind, also the barrels, boxes, and all other articles which have been used in the packing of such plants or refuse, is prohibited.

SEC. 2. The importation from America of fresh fruit and refuse of fresh fruit and all packing belonging thereto is prohibited when at the place of entry an inspection of the goods or packing reveals the presence of said San José scale.

The places at which the above-named articles may be entered are limited to the custom-houses at Bodenbach-Tetschen, Trieste, and Fiume.

SEC. 3. The provisions in paragraphs 1 and 2 are also applicable to transit trade.

SEC. 4. The Minister of Agriculture is empowered, the necessary precautionary measures being taken, to grant exceptions so far as the provisions contained in paragraph 1 are concerned.

SEC. 5. This proclamation is to take effect on the day of its publication.

EXPORT OF SPIRITS FROM RUSSIA IN 1897.

According to official information, the export of pure spirits amounted to 6,462,462 American gallons in 1897, against 5,370,366 gallons during 1896 and 5,640,553 gallons during 1895; that is, 1,092,096 gallons, or 20.3 per cent, more than in 1896, and 821,909 gallons, or 14.6 per cent, more than in 1895. Of this amount, rectified spirits represented, in 1897, 2,055,226 gallons; in 1896, 1,455,510 gallons; and in 1895, 1,844,932 gallons.

The export of rectified spirits in 1897 was 599,716 gallons, or 41.2 per cent, greater than in 1896 and 210,294 gallons, or 11.4 per cent, greater than in 1895. Thus the export of spirits increased greatly in 1897, especially the export of rectified spirits. The total export of spirits increased in all the sea custom-houses, with the exception of Revel, and decreased in the overland custom-houses. The export of rectified spirits increased in the Odessa, Libau, and Revel custom-houses and decreased in the overland custom-houses.

The following table shows the export of spirits in 1896 and 1897:

Custom-houses.	Total export.		Increase or decrease.	In that amount rectified spirits not below 95°.		Increase or decrease.
	1896.	1897.		1896.	1897.	
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*
St. Petersburg	123	....	− 123	123	....	− 123
Revel	855,016	662,246	− 192,770	96,297	179,874	+ 83,577
Dagensk	35,622	51,116	+ 15,494	....	....	....
Libau	1,876,872	3,182,330	+1,305,458	12,492	221,754	+209,262
Windau	51,042	298,986	+ 247,944	....	....	....
Odessa	1,318,002	1,635,075	+ 317,073	1,282,179	1,618,415	+336,236
Alexandrovo	313,515	149,291	− 164,224	10,289	....	− 10,289
Slupetsk	344,069	195,892	− 148,177	14,292	12,895	− 1,397
Peisern	136,487	78,905	− 57,582	39,797	22,288	− 17,509
Schipiorn	27,282	....	− 27,282	....	....	....
Prague	98,682	25,218	− 73,464	....	....	....
Mlavo	257,421	139,999	− 117,422	....	....	....
Graevo	56,182	43,400	− 12,782	....	....	....
Volochish	48	....	− 48	48	....	− 48
Total	5,370,363	6,462,458	+1,092,095	1,455,517	2,055,226	+599,709

W. R. HOLLOWAY,
Consul-General.

ST. PETERSBURG, *April 29, 1898.*

AGRICULTURAL EXPORTS OF URUGUAY.

Examination of the returns of the custom-house shows facts that should be of interest, both to United States producers and exporters, for the exports of this Republic come into direct competition in the Brazilian markets with those of our own country. The returns show that the quantities exported vary much, which, in great part, is due to the ravages of the "laugosta" locust, or grasshopper, as commonly known to our western producers. The figures for the last four years show these totals:

1894	$3,946,625
1895	3,735,776
1896	2,018,989
1897	1,201,433
Total	10,902,823

For the four years of 1890–93, the exportations were only $2,246,855, showing a gain in the last four years of $8,655,968, almost all of which came into competition with United States products, if not in Brazil, in Europe, where much of the wheat has lately been sent.

It will be of interest to trace at least three of the main products exported for the last few years:

Year.	Wheat.		Flour.		Corn.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Kilograms.		*Kilograms.*		*Kilograms.*	
1893	5,897,982	$169,377	11,537,968	$433,027	842,953	$23,277
1894	110,753,437	1,382,808	33,878,205	964,372	48,489,796	882,808
1895	99,964,568	2,079,761	19,362,588	681,744	68,645,707	797,761
1896	6,390,536	161,112	17,714,348	733,282	89,895,850	866,869
1897	12,548,612	392,637	11,454,191	612,356	1,377,974	34,565

During the same years fully 23,000,000 kilograms (50,705,800 pounds) of by-products of wheat were exported, at a customs value of $300,000. It will be seen that without the locust plague Uruguay can safely be counted upon as an exporter of wheat and flour, while corn will figure merely as a surplus of the Republic and will not compete with our products. Each year more land is brought under the plow, and it is safe to look for enlarged exports under ordinary conditions.

ALBERT W. SWALM,
Consul.

MONTEVIDEO, *April 3, 1898.*

ROOFING SLATES IN URUGUAY.

There is an increasing demand for roofing slates in Uruguay, the modern architect having found that he can build cheaper and better roofs with them. The slates used are the smaller size, 9 by 13 inches. They cost here $20 per thousand, but to that must be added the duty of $11.55 per thousand. The round slates are valued at $21.80 per thousand, but the duty is the same. The retail prices, as used in carpenters' estimates, is from $34 to $36 per thousand, with extra for putting them on. None of the 10 by 20 or 12 by 12 sizes are used, the smaller ones having been found satisfactory. The monetary values here stated are in Uruguayan pesos (1 peso=$1.0352 in United States currency). The slates come in weight freight from England at an average of 15s. ($3.50) per ton on board of lighter, ordinary breakage at owner's risk. The demand for slates will increase; but, should an American firm deem it worth while to enter the market, it should do so by establishing a depot and keeping it well supplied with the article, including the hardware necessary. The best American slate can find a market here—small at first, it is true, but as slate is the coming roofing material, the future may be relied upon. But it must be borne in mind that stocks must be maintained here, so that orders may be filled at all times. Failure in this direction has been ruinous in many other lines, not only to American interests, but also to those of the English, who persisted in knowing more about the business methods of the country than residents here, and preferred to have only samples on exhibition. These samples are yet to be seen—and that is all. The Italians and Germans have profited by the advice given them in CONSULAR REPORTS and are doing a good business.

ALBERT W. SWALM,
Consul.

MONTEVIDEO, *April 4, 1898.*

SMELTING AND CONCENTRATING WORKS IN MEXICO.

The Juarez Concentrating and Smelting Works, which have just been completed in this city, are ready to commence the conversion of crude lead, silver, and gold ores into metal.

The erection of this plant was begun about five months ago. Its operation was suggested by the discovery and opening up of new mines along the line of the Rio Grande, Sierra Madre, and Pacific

Railroad, which was completed about one year ago and which runs southwest from Ciudad Juarez to Casas Grandes.

The Juarez company, organized under the laws of the State of New York, started with a cash capital of $100,000 and ample banking facilities to handle all raw material it might purchase. The officers of the company are: President and general manager, Britton Davis, of El Paso, Tex.; vice-president, G. B. Agnew, New York; directors, J. T. Terry, E. D. Morgan, jr., A. G. Agnew, and S. J. Tilghman, all of New York, and Max Weber, of El Paso, Tex.

The products of the plant will be marketed partly in the United States and partly in Europe. I was informed by the general manager that the works were located on the Mexican, instead of the American, side of the Rio Grande River, in order to avoid the payment of a very high duty on the lead contained in the crude ore or raw material as brought from the mines, and to facilitate its reduction into metallurgical shape before subjecting it to the increased cost of transportation to the final reduction works in the United States.

The concentrator will have a daily capacity of 200 tons, which can be increased at any time by 50 per cent. The sampling works in connection with the concentrator will be able to handle 500 tons of ore per day. Mr. Davis says that two 100-ton smelting furnaces will be added to the plant in a short time, one for silver and lead and the other for copper.

It is the intention of the Juarez company to make this plant, in the course of a few years, the largest in Mexico. The managers believe the mineral resources of the States of Chihuahua and Sonora will justify them in increasing the capacity of their plant from time to time.

CHARLES W. KINDRICK,
Consul.

CIUDAD JUAREZ, *May 5, 1898.*

CANAL WORK IN ONTARIO.

The Galops Canal extends from the town of Iroquois (in the county of Dundas) to the head of the Galops Rapids, a distance of about 6 miles. The work of enlargement now in progress is designed to raise the normal level of the existing canal 6 feet—that is, to the height of the lowest known stage of water in the St. Lawrence River, above the guard lock at the head of the Galops Rapids. The prism of canal will have a width of 80 feet on bottom, with slopes of 2 to 1 throughout, and a depth of 15 feet at lowest water.

A new lock will be built at Iroquois about 200 feet south of the present one. The masonry will be of the best class of limestone, peck faced, laid in cement, and in courses varying from 18 to 30 inches in height. The lock will have two chambers, the lower to be 530 feet in the clear and the upper 270 feet by 50 feet in width, with a lift of 11½ feet at normal water, which, at the lowest stage of the river, is increased to 17 feet. The lock will be built during the season of 1898, and it is expected that one-half of the prism will be completed so that vessels with a draft of 15 feet may pass through with the opening of navigation in 1899.

About 1,200 workmen of all classes are now engaged in this work. This enlargement will cost the Government at least $2,000,000.

JOHN E. HAMILTON,
Commercial Agent.

MORRISBURGH, *May 20, 1898.*

FIREARMS IN MOROCCO AND AGRICULTURAL IMPLEMENTS IN GREECE.

In my report of March 8, 1898,* I sent a cutting from the London correspondence of the Birmingham Daily Post, in which it was stated that the Sultan of Morocco had decided to rearm his soldiers and that this meant an opportunity for the sale of arms. The sequel to the publication of the report is interesting. Referring to the matter, the London correspondent of the Birmingham Post, in yesterday's issue, said:

> The United States armament manufacturers have not allowed the approach of a war in which they are intimately concerned to interfere with their commercial enterprise. It appears that the information, which was first published in this column, that the Grand Vizier of Morocco meditated rearming such army as the Sultan possesses, was telegraphed to the United States. At once two rifle manufacturing companies sent representatives to Morocco, in the hope of securing the commission. One had apparently received orders to see the Grand Vizier himself, if it were possible, and he got as far as Fez in pursuit of the restless Court. There he desisted from his effort, probably because he comprehended the state of the Moorish exchequer, but did not know that the Sultan was raising money by the sale of his jewels. At all events, the order has not gone to America, and it is likely still to come to England.

A merit of the British provincial newspaper is the enterprise shown in gathering and publishing promptly news of value to British traders. The London representative of the Birmingham Post is especially active, and his latest tip to Birmingham manufacturers is as follows:

> Advices have reached a consular quarter here to the effect that there will be a good opening in Greece in the near future for British-made plows and all kinds of

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* See CONSULAR REPORTS No. 212 (May, 1898), p. 152.

farming and agricultural implements. The Government in Athens is setting aside a sum of about £30,000 ($145,800) to purchase one thousand plows, implements, and other material for the assistance of the Thessalian and other refugees, and further expenditure in the same connection will shortly follow.

MARSHAL HALSTEAD,
Consul.

BIRMINGHAM, *April 27, 1898.*

Consul Halstead writes from Birmingham, May 16, 1898:

In a report dated April 27, 1898, I inclosed a clipping from the Birmingham Daily Post, in which it was stated that the Grecian Government intended to spend £30,000 ($150,000) for agricultural implements. I also sent a copy of the paragraph to the consul at Athens.

To-day I am in receipt of a letter from Daniel E. McGinley, esq., the consul at Athens, in which he says:

> In answer, I must inform you that there is no truth in the report that the Grecian Government is setting aside £30,000 or any other sum of money to purchase plows and other agricultural implements for the assistance of refugees. The Government did buy a few plows for free distribution last year; but the result was not satisfactory, I am told, and there is no prospect of more money being expended in that direction, at least for the present.

SWISS GOODS IN THE PHILIPPINES.

During the past few years the Swiss trade with the Philippine Islands has not been as flourishing as formerly, although a considerable quantity of Swiss goods, such as Spain can not manufacture, has found its way into the islands and has been in fair demand. Among these goods may be mentioned the Toggenburg handkerchiefs, or bandannas, in blue, which have for years been popular among the natives; and, as Spain has not been able to produce these goods in solid colors, most of this trade has been given to Switzerland.

Other articles furnished by Swiss merchants are what are known to the trade as mousseline damassèe et mousseline imperatrice à carreaux (damasked and crossbarred muslins), which have been in ready demand up to within the last year, when, owing to the revolutionary condition of the islands, the trade was much depressed.

The embroideries of St. Gall, famous the world over, have also found their way to Manila, owing to the energy displayed by the Swiss merchants; and they command a fair market. During the year 1897, the exportation of these goods to the Philippines, while not large, was considerably increased over the year 1896. The best class of embroideries, such as high novelties, do not find a ready market; but the common white goods are popular and sell well.

Silk goods, such as black, broad silks, taffetas, faille noire, and half satins, are exported from Switzerland to Manila, while grenadines, gauze, tulles, etc., are exported principally from Lyons, France.

Watches and musical instruments, such as music boxes and musical clocks, are also furnished to the Philippines by the Swiss, and a fair business is done in this line. Swiss cheese is exported; but the Edam cheese of Holland finds the best sale, because it keeps better in that climate. Some straw goods, chemicals, and the so-called Turkish red yarns are furnished by Switzerland.

There are at present only ninety Swiss citizens on the islands, and they have been placed under the protection of the German consul.

JAMES T. DUBOIS,
Consul-General.

ST. GALL, *May 12, 1898.*

EXHIBITION OF EASTERN MANUFACTURES IN GERMANY.

I inclose an article clipped from the London Daily Telegraph, which tells of a new line of Government activity for the promotion of German foreign trade.

MARSHAL HALSTEAD,
Consul.

BIRMINGHAM, *May 13, 1898.*

A LESSON FROM GERMANY—PRACTICAL HINTS FOR BRITISH TRADERS.

[From our Berlin correspondent.]

Germany has always been remarkable for the paternal assistance given by its Government to the people in the attainment of knowledge for commercial and trade purposes. The specialist schools in the Fatherland within the reach of the youth of the country are an ocular illustration of this, as well as the collections of samples made at the residences of German ministers and consuls abroad, in the far distant East or West, open for the instruction of the Teuton full-grown merchant. But so far nothing has surpassed the very clever task carried out with most laudable intelligence by a committee of German experts sent recently to inspect and collect samples from the industry of China and Japan. The results of the labors of this committee are embodied in an exhibition of samples shown in two small rooms in an upper story of the palace of the German Imperial Diet in Berlin. The exhibition is not open to the general public; indeed, an ordinary layman, misled by the word "exhibition," would be dumbfounded at the sight of what he would probably call rows of more or less rubbish. This exhibition is intended for the specialist desirous of trading with the Far East. Germany having acquired a territorial footing in China, the Government hopes to find a new field for the energy and enterprise of German merchants. In order to prevent the shipwreck of small capitalists and to encourage Germans to try their luck, the ingenious idea referred to in these lines was conceived and carried out.

The members of the committee were instructed to examine on the spot what progress the Japanese had made in manufacturing those particular commodities which are generally exported from Europe; to make themselves acquainted with the wants of the people, and with their power to purchase goods to satisfy those wants; to report on the capacities of the Japanese and Chinese to render these goods cheaper for their own market, so that they could dispense with having the articles imported from Europe; and to give full information for the German export merchant by enumerating what actual goods he can import into China and Japan in successful competition with native manufacturers and rival European merchants.

This exhibition is not, as has been elsewhere erroneously stated, a collection of samples of the industry of China and Japan, but of samples from, as I said above, the industry of China and Japan. The visitor will look in vain for costly specimens of native art; the exhibition has nothing to do with native export trade. The committee is giving an object lesson to the Teuton trader to show him what he can profitably import into China and Japan. Take, for instance, a simple example—Japan manufactures "singlets" for men and exports them to China, where they can be purchased for 3d. or 4d. (6 or 8 cents). The ordinary Chinese workingman earns about 3½d. or 4d. (7 or 8 cents) per day, so that he can manage to put by a day's wage to purchase a singlet at this price, his other wants being small; but it is useless for a European trader to introduce for this class of purchasers singlets costing 9d. or 1s. (18 or 24 cents), as the people could not afford to buy them. The committee has therefore exhibited specimens of Japanese singlets at the lower price, and it is left to German manufacturers to decide whether they can compete at this figure and export in large quantities. On the other hand, some woolen vests and underdrawers of very excellent and expensive quality, manufactured also in Japan, are exhibited, as well as woolen shawls, socks, blankets, etc., to show the German manufacturers the power of their Japanese rivals to produce better class goods, and to enable them to form an opinion as to whether they can compete with them in regard to price in this field also. Samples of the sort of curtains and furniture stuffs from England that are marketable are given; but it would be useless for small merchants to export to China articles of this kind of a more costly nature for the benefit of the few thousand Europeans who might take them, as the general demand is too small to insure a profit.

The samples will continue to lie on view for some weeks more in Berlin, and then the collection will be split up and sent to the several manufacturing districts of the Empire, according to the nature of the industry, for the same instructive object. When information of the above kind is placed directly under the noses of German men of business, enabling them to obtain accurate and valuable information without running the slightest risk or disbursing a penny, it would be strange indeed if they did not compete successfully against the world.

NOTES.

American Petroleum in Denmark.—Vice and Deputy Consul Blom writes from Copenhagen, April 28, 1898:

The consumption of American petroleum in Denmark is steadily increasing, and that of Russian petroleum steadily decreasing. The consumption in the Kingdom in 1896 and 1897 was:

Year.	American.		Russian.
	Water white.	Standard white.	
	Gallons.	*Gallons.*	*Gallons.*
1896	2,853,959	12,398,277	1,106,606
1897	3,525,619	12,758,442	911,958

Prices declined steadily from January to July, 1897, and remained stationary during the balance of the year.

The Danish petroleum business is controlled by the Danish Petroleum Company, Limited, Copenhagen, which has a capital of $536,000. The company has seven tanks in Copenhagen; two in Aarhus, Jutland; one in Korsoer, Seeland, with a capacity altogether of 114,000 barrels. The company has also one tank steamer, *Christine*, of 17,000 barrels capacity, which plies regularly between the United States and Denmark, and British tank steamers are chartered. The steamers *Duffield*, *Lumen*, *Beacon Light*, and *Phosphor* appear to be in regular trade from the United States to Denmark. The consumption of water white is steadily increasing, and almost every household prefers it to any other. Russian petroleum, the quality of which comes nearest to the American standard white, is about 10 per cent cheaper than the latter; but the Danish public prefers American petroleum, although at a higher price.

Exports from Switzerland.—The following, dated St. Gall, May 14, 1898, has been received from Consul-General DuBois:

During the first four months of 1898, the amount of the exports from Switzerland to the United States was $4,501,285, which is $445,870 less than was exported during the same period last year. There was a decrease in exports in every consular district except that of Horgen, the largest being in Basel, principally in aniline colors and timepieces.

During the first four months of 1898 the exports from St. Gall to the United States were $1,819,055, which was $103,575 less than during the same period in 1897. This falling off is due directly to the influence of the war, and also to an energetic attempt to check undervaluations of goods sent to the United States from St. Gall. The articles losing most during these four months were: Embroideries, $54,999; dress goods, aprons, handkerchiefs, and neckwear, $154,819. Those gaining the most were: Muslins and cambrics, $15,399; silk and cotton laces, $57,903.

Emigration from Switzerland.—Under date of May 12, 1898, Consul-General DuBois, of St. Gall, says:

Last year less people emigrated from Switzerland than for a number of years past. Over 80 per cent of the emigrants went to the United States. During the past five years the number leaving Switzerland was 20,132. Last year, 2,508 emigrated; in 1896, 3,330; in 1895, 4,268; in 1894, 3,849; and in 1893, 6,177.

Of those who emigrated last year, 1,476 were male and 1,032 female. Three hundred and ninety-six were under 15 years of age, 1,935 were under 50, and 167 were over 50 years old. The number who emigrated to the United States during 1897 was 2,149. Three went to Canada, 6 to Central America, 55 to Brazil, 12 to Uruguay, 233 to the Argentine Republic, 5 to Chile, 7 to Australia, 33 to Africa, and 3 to Asia. Eighteen hundred and seventy, or about 75 per cent of the total number, sailed by French lines.

American Agricultural Implements in Southern France.—Consul Skinner, of Marseilles, under date of May 7, 1898, writes:

Replying to a request for information from an export association in the United States, I have to say that the consular district of Marseilles is not of itself a consumer of agricultural implements to any considerable extent. Farming, as Americans understand that term, is not engaged in; and, aside from the small tools used in truck gardening, the only important demand for implements of any description is for wine presses. There is, however, a good demand here for implements which go to other localities. I am advised by the agent of the Cyprian Fabre line of steamships that his company alone has brought to Marseilles from New York, between January 1 and April 1, 2,419 cases of American farm implements, and the dealers here say that the United States controls the trade of this section.

These 2,419 cases included 1,386 cases of plows and hayrakes, 996 cases of harrows, and 37 cases of assorted wares.

The most important house in this line in Marseilles is that of Th. Spilter, Rue de la Republique, and who also has houses at Paris, Bordeaux, Tunis, and Toulouse. His specialties are Wood's harvesting machinery and Oliver plows. He declines to go into the question of prices and discounts. Another heavy dealer in similar manufactures is Mallet, Boulevard d'Accés, Marseilles. Broadly speaking, the duty on agricultural machinery is 15 francs per 100 kilograms ($2.89 per 220.46 pounds).

New Tariff Law in France.—Consul Thackara sends the following from Havre, dated April 20, 1898:

The Chamber of Deputies has been discussing a bill making a large increase in the French customs duty upon the importation of live pigs, fresh and salted hog meat, lard, and hog products (charcuterie). The bill was favorably acted upon by the Senate on March 22, with the addition of the following article:

> The Government is authorized to concede, by decree, temporarily, the benefit of the duties provided for in the minimum tariff for charcuterie and lard, to the countries whose products do not enjoy in their entry into France the privileges of those of the most-favored nation.

This bill is now simply awaiting the signature of the President to become a law.

The concession was asked for by the Government, and is intended to strengthen the commercial relations existing between the United States and France in the absence of any commercial treaty. It gives the President of the French Republic the power at any time he deems proper, by making a decree, to allow the products of the United States mentioned in the above article to be imported into France, and pay the customs duties named in the minimum tariff.

Cattle in Malta.—Consul Grout sends from Malta, under date of May 7, 1898, copy of the regulations relating to the imports and slaughter of cattle issued by the local government. Extracts from the regulations are given below:

> Any shipment of cattle, any part of which is found to be suffering or to be suspected of suffering from an infectious or contagious disease at the time of arrival or after a period of inspection, is to be detained in quarantine.
>
> Should the existence of cattle plague be verified before landing, the cargo will not be allowed to land.

Cattle intended for importation into these islands must be accompanied by a certificate stating the place of their origin and the fact that cattle disease has not prevailed in that place (with, as far as can be ascertained, the route followed from any inland station to the port of embarkation) during the three months previous to the date of embarkation. Such certificate shall be given by the British consular authority at the places of origin and embarkation, or, if there is no such British consular authority, by the local government authority of the places of origin and embarkation.

Vessels arriving in this island having on board more than 250 head of cattle (bovine) are to go into the quarantine harbor, and the cattle are to be inspected in the cattle inclosures of the lazaretto.

The importation of dogs is subjected to three months quarantine.

Ivory Sales in Antwerp.—Consul Lincoln, of Antwerp, under date of May 5, 1898, writes:

The second quarterly auction of the year was held on the 3d instant, and attracted a large number of buyers. The ivory offered was as follows, the figures being approximate:

	Pounds.
Congo	65,476
Soft	1,984
Angola	61,067
Siam	66
Sumatra	8
Total	128,601
Total for last year	162,258

The whole stock was sold at steady prices, at an average rise of 38.6 cents. The price of the heavy species of tusks was strong; those of from 50 to 70 pounds advanced in price about 19.3 cents, the flat species 19.3 to 38.6 cents. The price of heavy tusks for billiard balls advanced from 19.3 to 38.6 cents; the light species as well as the scrivailles, both solid and hollow, remained unchanged.

The stock on hand to-day is 127,866 pounds, as compared with 185,186 pounds in 1897. The date of the next auction is fixed for the 2d of August.

Russian Trade with Egypt.—Under date of March 23, 1898, Consul Smith writes from Moscow:

Russia exports to Egypt at present about 3,000,000 rubles' ($1,500,000) worth and imports 17,000,000 rubles' ($8,500,000) worth. There is every hope, however, that in the near future Russia will increase her exports.

The following table will show the percentage of goods imported into Egypt from all countries:

Country.	Timber.	Cattle, live.	Flour (wheat or corn).	Grain.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*
Russia	23	6	59	27
Sweden	27			
Turkey	19	78		69
Roumania	11			
Austria.	10			
France			24	
Persia		12		
Other countries	10	4	17	4

Cost of the Siberian Railway.—The following, bearing date April 29, 1898, from Moscow, has been received from Consul Smith:

The committee of the Siberian Railway recently held a meeting and rendered its accounts, which contained the following data of expenditures incurred from 1893 to 1897, showing the total cost of the construction of the great Siberian Railway:

Description.	Cost.	
	Rubles.	
Construction of the Western Siberian Railway, without the Baikal branch	50,743,111	$25,371,555
Central Siberian Railway	97,766,591	48,888,295
Branch line of Ekaterinburg-Cheliabinsk	6,535,258	3,267,629
South Ouroussisk branch	22,416,284	11,208,142
North Ourouissisk branch	22,461,130	11,230,565
Irkutsk-Baikal branch	2,405,914	1,202,957
Steam ferry across the Lake Baikal	3,404,171	1,702,085
Zabaikalski Railway	72,447,186	36,223,593
Tomsk branch	2,609,765	1,304,882
Onon branch to the Chinese frontier	32,727,600	16,363,800
Nieolski branch to the Chinese frontier	8,811,120	4,405,560
Perm-Cotlass branch	36,513,886	16,256,943
Various supplementary expenditures	21,167,865	10,588,932
Total expenditure	371,009,947	188,014,938

Out of the above amount, there has been already advanced 325,991,320 rubles ($162,995,660). Besides this, there have been expended for topographical and astronomical works, irrigation, surveying, geological researches, agricultural implements, etc., the sum of 11,957,327 rubles ($5,978,663.50).

Steamship Communication with Russia.—A letter has been received by the Department from Mr. Charles Earl Currie, Danish vice-consul at Louisville, Ky., calling attention to a report entitled

"Need of direct communication with Russia," by Consul Smith, of Moscow, published in Consular Reports No. 212 (May, 1898), p. 149. Mr. Currie states that the United States has practically direct communication with Russian and Baltic ports by the Forenede Virginia Baltic Line from Newport News, and the Forenede Gulf Baltic Line from New Orleans, the two lines being operated by the United Steamship Company, of Copenhagen, a large and wealthy corporation owning one hundred and twenty vessels and carrying on an extensive trade in the Baltic. Although goods for Russia would have to be transshipped at Copenhagen, says Mr. Currie, it would be into vessels owned by the same line; and all of the vessels in the Newport News service take through cargo to Russia, and, with the assistance of the railroads of the United States, give through rates from point of origin to destination.

An account of this line was given in Consular Reports No. 213 (June, 1898), p. 236, in a report by the United States vice and deputy consul at Copenhagen, Mr. Blom.

Customs Returns of Manila.—Consul Williams sends from Manila, under date of April 2, 1898, a clipping from a local newspaper, with translation, showing, as he says, the flourishing condition of the Manila customs. The inclosure reads:

CUSTOMS OF MANILA.

[From El Comercio, Manila, March 24, 1898.]

The increase shown during the month of February of the present year in the customs of Manila, compared with that in the same period of 1897, amounts to $67,940.40, as follows:

Description.	1898.	1897.	Increase.	Decrease.
On imports	$184,843.34	$198,287.59		$13,444.25
Extra tax of 4 per cent	91.08	452.74		361.66
On exports	72,832.17	110,574.15		37,741.98
Tax of 2 per cent on unloading	36,488.22	24,022.98	$12,465.24	
Consumption tax	19,292.30	12,461.62	6,830.68	
Tax on cargoes	9,426.13	17,552.11		8,125.98
Extraordinary tax of 6 per cent on cargoes	109,103.99			
Transshipment	62.17	231.07		168.90
Storage	427.00	1,206.23		779.23
Fines and extra dues	482.63	320.14	162.49	
Total	433,049.03	365,108.63	67,940.40	

Shipping of the Philippines, 1897.—Consul Williams writes from Manila, February 21, 1898:

During the year 1897, the record of arrivals and departures of vessels of all flags from Manila, Iloilo, and Cëbu, the open ports of the Philippine Islands, were:

Flag.	Arrivals.				Departures.			
	Steamships.	Ships.	Barks.	Total.	Steamships.	Ships.	Barks.	Total.
United States	1	15	8	24	1	13	8	22
Great Britain	150	20	22	192	149	23	18	190
Germany	28	1	2	31	28		1	29
Spain	47			47	47			47
Japan	10			10	10			10
Norway	19	1	1	21	18		1	19
Holland	2			2	2			2
Denmark			3	3			1	1
Hawaii			1	1			1	1
France	1			1	1			1
Total				332				322

It should be noted that certain defects as to tonnage, etc., exist in the records supplied me.

Sheep and Wool in Cape Colony.*—Under date of March 15, 1898, Consul Roberts, of Cape Town, sends the following statistics as to the sheep and wool industry:

Year.	Area.	Sheep.	Wool.
	Sq. miles.	*Number.*	*Pounds.*
1856 (estimate)	197,044	6,459,552	8,224,962
1865 (census)	197,044	9,836,065	18,905,036
1875 (census)	199,950	10,976,663	28,316,181
1891 (census)	221,311	16,706,106	56,038,659
1895 (estimate)	276,917	14,409,434	45,521,508

Mr. Roberts adds:

Cape Colony in 1856 and 1865 did not include Kaffraria, Transkeian territories, Pondoland, Griqualand West, and Bechuanaland; in 1875 the Transkeian territories, Pondoland, Griqualand West, and Bechuanaland were not included; and in 1891 Bechuanaland and Pondoland were not included. The territories that have been from time to time absorbed are more noted as cattle than sheep runs.

Sugar Growing in South Africa.—Consul-General Stowe writes from Cape Town, April 22, 1898:

The production of sugar is at present confined to the colony of Natal. Fifteen thousand acres are under cultivation, producing about 20,000 tons per annum and about 160,000 gallons of rum. Work is done by coolies, at a charge of 25 cents per day for wages, food, and lodging. The cultivation affords a fair prospect for growers of small capital. The acreage will increase yearly, and the exhibition of machinery and appliances by the manufacturers of the United States at the very creditable annual fairs held in Natal will tend to educate growers in the use of efficient sugar machinery.

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* This report was made in answer to a request by the president of the National Wool Growers' Association, to whom a copy has been sent. For a series of reports on sheep and wool in Australasia, see CONSULAR REPORTS No. 212 (May, 1898), p. 68.

Malt in South Africa.—The following is a copy of a letter to a New York firm,* transmitted by Consul-General Stowe, of Cape Town, under date of April 8, 1898:

All barley malt used in this country is purchased through houses located in London, England, and is shipped both in bags and tanks, the bags being double and made of thick sacking. The tanks are of sheet iron, say No. 24 gauge. The weight of the malt in either sacks or tanks is 200 pounds. There are so many qualities that breweries here do not like to experiment and prefer to buy in London, where the quality requisite for the climate is known. Much of the barley used in London for malt is from the United States, and California barley is very highly spoken of by the brewers. The imports of malt for 1897 were to the value of $178,848, of which four-fifths came from Great Britain, and the other fifth from Germany. American barley malt ought to find a market here, but the quality in demand and other conditions of the market should be known, and personal investigation would seem essential.

Exposition in South Africa.—Under date of April 18, 1898, Consul-General Stowe, of Cape Town, says:

I am requested to present to the manufacturers and producers of America the advantages of exhibiting their productions at the exhibition to be held at Grahamstown, Africa, from December 15, 1898, to January 21, 1899.

It will be known as the South African Industrial and Art Exhibition, and is guaranteed by the governors of Cape Colony, South African Republic, Orange Free State, and Natal, and the high commissioners of Rhodesia and Basutoland. Over $100,000 have been subscribed, and exhibits from all parts of the world have been asked.

There are five classifications of exhibits, viz: (*a*) Raw materials; (*b*) manufactures; (*c*) mining and machinery; (*d*) natural history and science; (*e*) arts.

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* The original has been forwarded to the correspondent.

To the manufacturers of agricultural implements and vehicles, and mining, cotton, woolen, electrical, woodworking, brickmaking, sugar, and all other kinds of machinery, this exhibition will be invaluable.

Exposition in Nuremberg.—Consul Weber, of Nuremberg, under date of April 23, 1898, writes:

It may be of interest to know that there is being held in this city a small but very unique exposition, called the "International Exposition of Placards." It was opened on March 24, 1898, and will be closed about the middle of May next.

Like all the previous expositions held in this city, this one was arranged by the "Bayrisches Gewerbemuseum" (Bavarian Trade Museum, similar to, but on a smaller scale than, the Philadelphia Museums).

It is being held in the rooms of the museum, and its purpose is to demonstrate to the Bavarians the advantages of advertising by posters. French, Belgian, English, American, Russian, Austrian, Italian, Spanish, Norwegian, Dutch, Japanese, and German placards are exhibited, but French and Belgian are predominant. All of these placards were obtained by the above-mentioned museum from nonofficial sources.

It is the intention of the museum to arrange another exposition next year, as a continuation of the present one, in which only German placards are to be exhibited.

Winnipeg Industrial Exposition.—Consul Graham, of Winnipeg, says, under date of June 3, 1898:

For the past seven years the annual meeting held under the auspices of the Winnipeg Industrial Exposition Association has been the leading event of the year in the industrial line in the Canadian Northwest. The eighth of these annual expositions will be held in the grounds of the association in the city of Winnipeg, July 11 to 16 proximo, and, judging by the interest already manifested and by the evidences of general prosperity in all industrial lines throughout this region, it promises to surpass in attendance and interest all former events of the kind. This exposition should be largely and generally patronized by manufacturers and dealers of the United States. I can conceive of no better means of bringing American goods directly to the favorable notice of the people of this country than through the medium of this exposition.

Canadian Appropriations for 1898-99.—Under date of April 30, Consul Smith, of Victoria, says that the following are among the appropriations made by the Dominion Government: Forty thousand dollars for a survey of the Edmonton route to the Yukon and $45,000 for a survey of the Stikine River to an ocean port in British Columbia; $396,000 for government of the Yukon district; $10,000 for Nanaimo Harbor, improvements of the south channel, etc.; $5,000 for Columbia River improvements above Golden; $20,000 for improvement of ship channel of Fraser River; $3,000 for general repairs and improvements to harbors, rivers, and bridges; $3,000 for Skeena River; $5,000 for improvements in the Columbia River, in the narrows between Upper and Lower lakes; and $2,000 for the removal of rocks in the Columbia above Revelstoke.

Cable from Vancouver to Victoria, British Columbia.—Consul Dudley writes from Vancouver, under date of April 27, 1898, that a telegraphic cable has just been laid from English Bay, west of Vancouver, to Departure Bay, near Nanaimo, Vancouver Island, a distance of 32 miles. This cable, says the consul, replaces an old and imperfect one, which heretofore connected the mainland with Victoria and other points on Vancouver Island. A telegraph line will be connected with the cable at Departure Bay, and will follow the line of the railway from Nanaimo to Victoria; the line formerly in use passed through the forests and was very difficult to keep in repair. It is now expected that there will be uninterrupted communication between the mainland and Vancouver Island.

Trade Conditions in Honduras.—Consul Johnston, of Utilla, under date of April 30, 1898, says:

The first part of the month the exports of bananas, plantains, and cocoanuts were up to the average; but during the last ten days the trade has been cut short on account of the war with Spain. The vessels flying the United States flag have been laid up in New Orleans, and the only ones in the trade are those flying the Norwegian flag. The effect has been to lower the prices, and unless more vessels are employed, much of the fruit will rot on the trees and be a great loss to the producers. This will naturally affect the imports, which nearly all come from the United States. If there could be a regular mail line between New Orleans and Utilla and Cuba, it would be of great benefit to the trade at those points.

Machinery in the Argentine Republic.—Consul Bouchsein writes from Barmen, May 5, 1898:

In a special report to the Imperial Government, a German consul calls attention to the town of Tucuman as a place suitable for the sale of German machinery.

Tucuman, or, more fully, San Miguel de Tucuman, is the capital of the province of Tucuman, Argentine Republic, with a population of about 17,000; it is connected by rail with Cordoba and Rosario.

The sugar factories there, thirty-three in number, have procured their machinery almost wholly from France, on account of favorable terms of payment. Germany has furnished apparatus for distilleries, which are connected with the sugar factories, sulphur ovens, etc. The sugar industry in Tucuman is growing from year to year, and much machinery of a general character will be required shortly. Some of the large manufacturers of machinery in France have had for many years representatives resident in Tucuman.

American Locomotives and Air Brakes in Russia.—Under date of May 21, 1898, Ambassador Hitchcock writes from St. Petersburg:

An order has just been sent to the Baldwin Locomotive Works, Philadelphia, for sixty-five locomotives for the Manchurian Railway, making a total of eighty "Baldwins" ordered for the Manchurian Railway within the last nine weeks, and a grand total of one hundred and thirty-eight "Baldwins" sold to Russian railways within the last six months. I am also pleased to report that the Imperial Government has awarded the Westinghouse Company a contract amounting to between $2,000,000 and $3,000,000 for the equipment of the rolling stock of its railways with Westinghouse air brakes, and that this contract will probably be duplicated in the near future.

Education of Children in Finland.—Consul Smith, of Moscow, on March 24, 1898, says:

About 38 per cent of the population in Finland can read and write. There are 1,400 schools, supported in part by the Government; 21 of these are intermediate schools. Each of the 466 districts has an inspector besides a board of directors. Children commence school at the age of 10; from 7 to 10 they receive instruction at home from the parish priest. Coeducation has been most successful in these schools. In Finland, women share in all industries, and are especially capable as teachers. Both men and women teachers receive careful instruction and preparation. They are treated with the greatest deference, nor are their duties confined to the schoolroom; they exercise a supervision over the selection of books for home reading, and during the summer vacations they accompany the children on excursions, giving them lessons from nature.

Foreign Capital in Baku.—Consul Smith, of Moscow, under date of April 29, 1898, says:

The latest reports from Baku show that foreign capital has entirely taken possession of that district. Foreigners are to be seen everywhere, so much so that Baku will soon be transformed into an English town. The investments are considered good, and, if no objections are raised, no one will be surprised if in the near future the whole naphtha trade gets into the hands of the English.

Bids for Belgian Electric Railway.—Consul Morris sends the following, dated Ghent, May 21, 1898:

Plans and specifications for the overhead electric railway line between Mons and Bossu, in Belgium, have been published by the Minister of Railways; they also include provisions for a complete electric power house. The estimated cost is $125,450, of which $46,320 is for the rolling stock. There is a clause providing that the builder must operate the line for a fixed sum during two years under the Government's control. All the material necessary for the construction of the road must be manufactured in Belgium. The entire work must be completed within twenty-five weeks after the award, and the line must be opened at the latest in February, 1899. The line will have a total length of 6.6797 miles, not including the branch lines.

New American-Netherlands Steamship Line.—Under date of May 6, 1898, Consul Listoe, of Rotterdam, says:

This week a new steamship service has been opened between New York, Philadelphia, and Rotterdam. Steamers belonging to the company starting the service have already been plying between the aforesaid American ports and Rotterdam since January last, but it is the intention now to make it a regular fortnightly service. The first departing steamer will be the Norwegian steamship *Lovstakken*, from New York on May 10, followed by the steamship *Blaamaanden* on May 25. For the Philadelphia service three steamers—the *Queenswood*, *Cresyl*, and *Avona*—will be used. The line will carry freight only.

Swedish Duties on Superphosphates and Velocipedes.—Minister Thomas writes from Stockholm, May 4, 1898:

The Riksdag to-day, in joint session of both houses, voted, 187 to 174, to place a duty of 25 öre (6.7 cents) for 100 kilograms on superposhphate imported into Sweden. Superphosphate has heretofore been free of duty. The Riksdag also voted, 210 to 147, to place a duty of 25 crowns ($6.70) each on velocipedes imported into Sweden, and on parts of velocipedes a duty of 2 crowns (53.6 cents) per kilogram. The duty has heretofore been 15 per cent ad valorem.

Bills of Exchange on Danish Banks.—Under date of May 11, 1898, Mr. Blom, vice and deputy consul at Copenhagen, writes:

I have noticed that American bankers' checks contain the words "exchange for" or "first of exchange," and they are on that account subject to the Danish stamp tax of 20 øre (5.36 cents), irrespective of the amount of the check. The checks are mostly for small amounts, but aggregate a very large sum, and, as checks are not subject to the Danish stamp tax, American bankers will do well to eliminate the word "exchange," as the Danish public objects to paying the stamp tax on all bills of exchange (checks) received from the United States.

Exposition of Horticulture at Ghent.—Under date of May 12, 1898, Consul Morris, of Ghent, writes that the fourteenth quinquennial international exposition of horticulture was held in that city from April 16 to 24, inclusive, under the auspices and management of the Royal Society of Agriculture and Botany. The exposition was highly successful, the jury of awards comprising more than two hundred foreign horticulturists and botanists. The full text of Mr. Morris's report has been transmitted to the Department of Agriculture.

Demand for Fire Engines in France.—Consul Jackson, of Cognac, under date of May 23, 1898, writes:

I have to report that several cities in this consular district, which at present have no effective fire department, anticipate purchasing steam fire engines. Cognac already has a fund for this purpose. American manufacturers should address M. E. Jouard, No. 1 rue Louise de Savoie, Cognac, Charente, France.

Horse Meat in Europe (Correction).—The Department is in receipt of a letter from a member of Congress calling attention to an error in CONSULAR REPORTS No. 212 (May, 1898), page 108, in a report entitled "Horse meat in Europe," by Consul-General DuBois, of St. Gall. The statement was quoted from a Swiss newspaper that an American horse-meat company had been organized in Kearny, New York. The name of the town referred to should be Kearney, New Jersey.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
H. C. Morris, Ghent	May 12, 1898	Exposition of horticulture at Ghent.	Department of Agriculture.
Do	May 13, 1898	Flax industry in Flanders	Do.
J. Blom, Copenhagen	May 13, 1898	Chemical tests of milk and cream.	Do.
Do	May 31, 1898	Utilization of land; combating smut in seed corn.	Do.
E. Schneegans, Saigon	Mar. 29, 1898	Rice	Do.
Do	April 29, 1898	do	Do.

FOREIGN REPORTS AND PUBLICATIONS.

Trade Conditions in Peru.—In the December editions of the Moniteur Officiel du Commerce, Paris, appears a series of letters from Lima, describing commercial conditions in Peru. Credits, says the correspondent, are from sixty to ninety days. He gives the following details of trade in articles of import:

Groceries, an important line of commerce, comprise the most varied productions, such as spices, provisions, preserved foods, wines, liquors, candles, wrapping paper, etc. Household utensils, crockery, glass, etc., are sold in the same establishments.

There is an important consumption of the so-called Swedish matches, of which there is no manufactory in the country. The greater part of the wax matches comes from Italy. Those made in the country are of an inferior quality. They are kept by grocers. Starch is manufactured locally.

The manufacture of furniture has received a certain impetus, so that the importations have become insignificant, and are limited entirely to the finer grades.

Lighting by hydrogen gas is so universal in Lima and Callao that apparatus for its use is sold everywhere. Petroleum lamps are little used in Lima, but find sale in the interior towns, which are deprived of gas. Since the introduction of electric light, its use has spread more and more, not only for public but for private illumination. Petroleum lamps and gas apparatus are sold in the hardware shops.

Munitions of war and everything accounted as such—rifles, sabers, etc.—are prohibited as articles of import; this limits the trade in arms to revolvers, fowling pieces, fencing arms, side arms, knives, daggers, etc. The machete, the use of which is so general in the countries of Spanish America, is sold in hardware shops.

Formerly there was a considerable importation of candles, mostly from Belgium. Whether the recent installation of the manufactory of Guadaloupe has had any influence on this import is not yet known; this establishment prepares its own stearin.

Ceramic pavements are not in general use, as they should be in a country where marble flagstones are so abundant. The sidewalks of the best streets are of squares of compressed cement. For the streets themselves, various things have been tried; in Lima little, pointed pebble stones, which require frequent repairs, are used. In one street a wooden pavement has recently been laid, excellent for carriages, but very expensive. In a few other streets cut paving stones have been placed, which are very good and more durable than those of wood.

A very large quantity of playing cards, mostly Spanish, is imported.

Silk hats, hard and soft felts with wide borders, are worn in Peru; in summer, imported straw hats (sailor) or the Panama hat of the country.

Almost all the coal consumed in Peru comes from abroad, the mines of the country being but little worked. At Lima, the consumption is large, contrary to the general custom in Spanish America. Railways and manufactories also employ coal.

Although there are several factories of boots and shoes at Lima, and the articles are good and not too dear, yet a certain quantity of fine shoes, principally for ladies, are imported.

The consumption of cement is increasing; it is found in the hardware shops.

Parisian fashions are followed here. Women dress with elegance. Black is much worn. For church toilet, ladies sometimes wear the Spanish mantilla, but oftener the "manta," which is an indispensable part of the morning dress. The manta is the national feminine garment of all classes of society; it is a large, black shawl, light, of wool or of crêpe de chine, plain or embroidered, which is folded diagonally and worn on the head, fastened around the neck by pins.

There are several shops at Lima for men's clothing. Stuffs for summer wear are most in demand; there are days, however, when warmer garments are necessary.

With the exception of corrugated sheet iron, iron has not yet made its appearance in buildings. In Lima, houses are usually of one story; the floor is of brick (sometimes of stone) and the walls of wood covered with clay. This kind of construction has been adopted as much on account of earthquakes as because of the cost of materials. Upon wooden uprights are nailed large bamboos, and a house in process of construction has the aspect of an immense cage. The bamboos are afterwards plastered with clay and form hollow walls about 6 inches thick. Houses are rarely built in any other manner, and I have seen the steeples of churches so constructed. The houses invariably have flat roofs, composed of planks covered with clayish earth about 4 inches thick. This earth absorbs the water; but when the drizzling rain is more abundant or more persistent than usual, it happens that the water penetrates the roof and causes serious damage in the houses. In some few houses the roof is tiled.

Pitch pine, or a white wood called Oregon pine, is used in building. Both come from the United States. In some highly finished buildings oak and maple from the sierras, woods which are very expensive in Lima, are used. For the wainscoting of fine buildings, the cedar of Nicaragua is preferred. Almost all woods, except the cedar and oak, are attacked by insects. When the advantages of metallic beams and corrugated sheet iron are appreciated, doubtless the system at present followed will be abandoned. The belief is often expressed that the dampness of the climate will quickly destroy iron. This fear is absolutely chimerical, and is contradicted by the perfect preservation of iron bridges, light railings, and other metallic constructions which have been in existence for a long time in Lima. Clay is very abundant in the vicinity of the capital and is of excellent quality. This does not, however, prevent bricks 50 by 100 by 210 millimeters (1.97 by 3.94 by 8.34 inches) from costing 25 soles ($10.60) per thousand. Unbaked bricks or "adobes," which are 75 by 150 by 450 millimeters (2.95 by 5.9 by 17.7 inches) and which cost 30 soles ($12.70) the thousand, are almost exclusively used for building. Lime of good quality costs at the present time 2 soles (84 cents) the cahiz (151 gallons).

Umbrellas are never used. Foreigners who carry them attract universal attention. Parasols, on the other hand, are much in favor.

The "poncho" is the national Peruvian garment for horseback riding. It is a plaid or striped shawl, of vivid colors, about 2⅚ yards long and 1¾ yards wide, with a slit in the middle for the passage of the head. Formerly it was made of silk and was expensive. To-day the taste for riding has decreased in the town, and those still addicted to this kind of sport have adopted the English costume. The poncho is now used only in the country and by travelers. For long trips it is undoubtedly useful. Many of wool, more or less fine, are manufactured in the country, so that importations do not reach a very high figure.

The manufacture of cigars and of cigarettes has not yet reached a high degree of perfection in Peru. For this reason, although this country could become an exporter, there is a heavy importation of tobacco, cigars, and cigarettes, principally from Ecuador, San Salvador, Cuba, and Mexico. A package of twenty cigarettes of the country, containing a little tobacco wrapped in coarse yellow paper, costs, wholesale, 9 cents. Havana cigarettes cost three times as much.

Among the linen textiles imported are those used for underclothing, for tables, and beds. The importations of cottons are, however, much more important, especially printed and écru goods, calicos, muslins, fancy textiles, ticking or drills for clothing, etc.

The current prices of some foreign articles in the market of Lima may be found of interest:

Matches:			
Swedish	per package of 10 boxes		$0.09
Wax	do		.20
Beer	per case of 48 bottles		15.36
Sea biscuits	per cwt	$3.14 to	4.49
Stearin candles	per pound		.35
Cashmere	per yard	1.80 to	2.69
Cement	per barrel of 180 pounds		2.92
Nails	per cwt		3.59
Calico	per yard		.20
Unbleached cotton cloth	do	.15 to	.20
Prepared colors	per kilogram (2.2046 pounds)	.36 to	.67
Black cloth	per yard	1.79 to	5.38
Dynamite	per kilogram (2.2046 pounds)		.45
Iron	per cwt	2.25 to	2.47
Flannel	per yard		.70
Gin	per case		6.29
Coal	per 1,000 kilograms (2,204 pounds)		9.43
Oil:			
Linseed	per cwt		6.29
Colza	per gallon		.61
Wrapping paper	per cwt	4.04 to	6.11
Petroleum	per gallon		.70
Powder for hunting	per cwt	22.45 to	35.92
Blasting powder	do		11.67
Sacks of jute	per 100	10.78 to	13.47
Pails of galvanized iron	per dozen	3.14 to	3.37
Caustic soda	per cwt	4.04 to	4.26
Sulphate of copper	do	8.08 to	8.98
Corrugated sheet iron	do		3.59
Lead pipes	do	5.84 to	6.29
Window glass	per case of 10 square feet		4.49
Printed cotton goods	per yard		.20
Zinc sheets	per cwt		6.74

Industrial Development in Germany.—The Moniteur Officiel du Commerce, Paris, December 30, 1897, says:

Statistics have just been published giving details as to the condition of Prussian industries in 1895. Compared with former data, they show notable development.

Industrial enterprises in 1882 numbered 1,955,253, employing 4,257,942 workmen; in 1895 there were 1,990,244, with 5,861,589 men. The number of establishments has increased 1.79 per cent, and the number of workmen 37 per cent. The inequality of these two proportions can be explained by the depression which small industries have suffered for the benefit of the large. It would not be just to take the number of industrial establishments as a criterion of the development of trade; the number of workmen employed would be more exact. In Prussia the increase of workmen since 1875 has been in the proportion of 61.66 per cent, while the population shows an increase of 23.5 per cent. It might be interesting to show where the increase of workmen is distributed:

Branch of industry.	1882.	1895.	Increase.
			Per cent.
Horticulture	28,247	43,478	53.93
Stock raising and fisheries	21,114	22,598	7.03
Mines, iron and salt works	359,177	458,504	27.96
Quarries	216,931	314,258	44.87
Work in metals	285,112	383,814	34.62
Machines, instruments, and apparatus	200,528	316,369	57.77
Chemical manufactures	38,722	66,661	72.15
Work in fats, oils, and illuminants	24,399	35,038	43.6
Textile manufactures	428,543	441,885	3.11
Paper manufactures	48,856	72,250	47.88
Leather manufactures	68,354	86,692	26.83
Carpentry and cabinetwork	253,925	322,989	27.2
Alimentation	393,105	586,553	53.94
Manufacture of garments	741,142	800,427	8
Building	331,338	596,690	80.08
Drafting	35,970	66,198	84.04
Artistic occupations	7,672	9,503	23.87
Commercial	492,720	771,598	56.5
Insurance	6,720	12,593	87.4
Transports and communications (not comprising postal, telegraph, or railway service)	101,898	127,674	25.3
Catering	173,469	326,017	87.94

This table shows an increase, variable, it is true, in the personnel of every business; the smallest is in the manufacture of garments and textiles, which are, respectively, 8 and 3.11 per cent. This is due to the obstacles which exports in these lines meet in foreign tariffs. If to these two industries are added stock raising and fisheries, of which the personnel has increased only 7.03 per cent, it will be seen that all the other industrial branches show an increase of more than 20 per cent.

It is well to remark that these figures, however conclusive they may be in reference only to manual labor, can not in themselves give an exact idea of the industrial development of Prussia. The fact that this increase in the number of workmen coincides with the improvement of machinery and its general use, which permits an important reduction in manual labor, should not be lost sight of. Only by considering both, can the expansion of German industry in the last thirteen years be justly appreciated.

Bicycling in Smyrna.—An article in the Revue du Commerce Extérieur, Paris, February 19, 1898, says:

Bicycling in Smyrna is of recent vogue. It dates back at most five or six years, and has really assumed its present extension within the last three. To-day Smyrna possesses more than 500 bicycles of all prices and makes, and this number increases daily in notable proportions. The greater part has come from England, but recently American makes have been formidable competitors; and it may be said, now, that America furnishes 50 per cent; England, 25 per cent; and Belgium, Germany, and France, 25 per cent.

It is certain that importation from the United States gains ground daily, and, if competing manufacturers do not meet American prices and produce machines of the same solidity, that country will monopolize this market. The principal productive centers are Boston for America, Birmingham and Coventry for England. The forwarding ports are New York, London, Hamburg, and Antwerp; with the exception of the Germans, who give prices free on board at Smyrna, European and American manufacturers deliver their machines at the place of manufacture. The Americans, Germans, and Belgians make their sales including packing, while the English and French charge for it. This packing is done in very solid cases, which endure without risk all the shocks of transportation and of disembarkment. The pedals are disconnected.

As to the conditions of payment, Belgians and Germans grant credits of six, eight, and twelve months; English and French require payment in advance. The Americans, on the other hand, require 20 per cent in advance and the balance on delivery of papers at Smyrna. The conditions imposed by the English, Americans, and French avoid the risks of credit.

The reduced prices of United States machines will make this sport accessible to modest purses, and will develop this trade enormously. As soon as bicycles can be bought at the average price of 160 to 180 francs ($31 to $35) free on board at Smyrna, sales will increase largely. These machines retailed at 200 to 220 francs ($40 to $43) would leave profit enough to the local importers.

Roads are bad and are not kept in repair; consequently, machines noted for their quality and fineness can not be used. Solid wheels are needed. The bicycles in use to-day generally cover at each revolution from 4.8 to 6 meters (5 to 6½ yards).

French manufacturers could improve the trade with Smyrna, not only in machines, but in accessories. We would like to see our manufacturers study the American machines, and succeed in delivering to foreign markets bicycles both strong and cheap.

Construction of Railway Depot at Stockholm.—The Moniteur Officiel du Commerce, Paris, January 27, 1898, gives the following notice:

The administration of the railways of Sweden has been occupied for some time in trying to enlarge the depot at Stockholm, which is quite inadequate to meet the demands of continually increasing traffic. After examination, it has been decided that temporary repairs will not be sufficient, and that a total rebuilding will be necessary. The Swedish Government has determined, in consequence, to open an international competition among architects of different countries, offering three prizes of 12,000 crowns, 8,000 crowns, and 4,000 crowns ($3,216, $2,144, and $1,072), the contest to end the 30th of next August at midday.

The conditions in detail will be published in Swedish, German, French, and English, and distributed gratuitously on demand. A charge of 50 crowns ($13.50) will be made for plans and maps. Seventy-six will be delivered on payment of the above amount, which represents the cost of preparation.

Improvements on the Nile.—An article in the Revue du Commerce Extérieur, Paris, February 19, 1898, says that a loan of 13,000,000 francs ($2,509,000) has been negotiated in Egypt, the money to be used in the construction of two dams. Work will be commenced next year, and will probably not be finished for three years. The dams will form two solid works of masonry, with a height of about 16 feet above the river bed. The object is to relieve the pressure on the present dam and remove all fear of seeing it give way; further, the waters of the first rise of the Nile, which takes place in the month of July, will be diverted into the canals of the Delta, thereby saving the harvests.

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Vol. LVII. No. 215.

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CONSULAR REPORTS.

AUGUST, 1898.

COMMERCE, MANUFACTURES, ETC.

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DEPARTMENT OF STATE
UNITED STATES OF AMERICA

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1898.

PUBLICATIONS OF THE BUREAU OF FOREIGN COMMERCE.*

The publications of the Bureau of Foreign Commerce, Department of State, are:

I.—Commercial Relations, being the annual reports of consular officers on the commerce, industries, navigation, etc., of their districts.

II.—Consular Reports, issued monthly, and containing miscellaneous reports from diplomatic and consular officers.

III.—Advance Sheets, Consular Reports, issued daily, except Sundays and legal holidays, for the convenience of the newspaper press, commercial and manufacturing organizations, etc. [See pages I–VII.]

IV.—Exports Declared for the United States, issued quarterly, and containing the declared values of exports from the various consular districts to the United States for the preceding three months.

V.—Special Consular Reports, containing series of reports from consular officers on particular subjects, made in pursuance to instructions from the Department.

Following are the special publications issued by the Bureau prior to 1890:

Labor in Europe, 1878, one volume; Labor in Foreign Countries, 1884, three volumes; Commerce of the World and the Share of the United States Therein, 1879; Commerce of the World and the Share of the United States Therein, 1880–81; Declared Exports for the United States, First and Second Quarters, 1883; Declared Exports for the United States, Third and Fourth Quarters, 1883. Cholera in Europe in 1884, 1885; Trade Guilds of Europe, 1885; The Licorice Plant, 1885; Forestry in Europe, 1887; Emigration and Immigration, 1885–86 (a portion of this work was published as Consular Reports No. 76, for the month of April, 1887); Rice Pounding in Europe, 1887; Sugar of Milk, 1887; Wool Scouring in Belgium, 1887; Cattle and Dairy Farming in Foreign Countries, 1888 (issued first in one volume, afterwards in two volumes); Technical Education in Europe, 1888; Tariffs of Central America and the British West Indies, 1890.

The editions of all these publications except Tariffs in Central America, etc., are exhausted and the Department is, therefore, unable to supply copies.

In 1890, the Department decided to publish reports on special subjects in separate form, to be entitled Special Consular Reports. There are now the following Special Consular Reports:

Vol. 1 (1890).—Cotton Textiles in Foreign Countries, Files in Spanish America, Carpet Manufacture in Foreign Countries, Malt and Beer in Spanish America, and Fruit Culture in Foreign Countries.

Vol. 2 (1890 and 1891).—Refrigerators and Food Preservation in Foreign Countries, European Emigration, Olive Culture in the Alpes Maritimes, and Beet Sugar Industry and Flax Cultivation in Foreign Countries.

Vol. 3 (1891).—Streets and Highways in Foreign Countries.

Vol. 4 (1891).—Port Regulations in Foreign Countries.

Vol. 5 (1891).—Canals and Irrigation in Foreign Countries.

Vol. 6 (1891 and 1892).—Coal and Coal Consumption in Spanish America, Gas in Foreign Countries, and India Rubber.

Vol. 7 (1892).—The Stave Trade in Foreign Countries and Tariffs of Foreign Countries.

Vol. 8 (1892).—Fire and Building Regulations in Foreign Countries.

Vol. 9 (1892 and 1893).—Australian Sheep and Wool and Vagrancy and Public Charities in Foreign Countries.

Vol. 10 (1894).—Lead and Zinc Mining in Foreign Countries and Extension of Markets for American Flour.

Vol. 11 (1894).—American Lumber in Foreign Markets.

Vol. 12 (1895).—Highways of Commerce.

Vol. 13 (1896 and 1897).—Money and Prices in Foreign Countries.

Of these Special Consular Reports, Australian Sheep and Wool, Cotton Textiles in Foreign Countries, Files in Spanish America, Fire and Building Regulations, Malt and Beer in Spanish America, Port Regulations, Refrigerators and Food Preservation, and Tariffs of Foreign Countries are exhausted, and no copies can be supplied by the Department.

Of the monthly Consular Reports, many numbers are exhausted or so reduced that the Department is unable to accede to requests for copies. Of the publications of the Bureau available for distribution, copies are mailed to applicants without charge. In view of the scarcity of certain numbers, the Bureau will be grateful for the return of any copies of the monthly or special reports which recipients do not care to retain. Upon notification of willingness to return such copies, the Department will forward franking labels to be used in lieu of postage in the United States, Canada, the Hawaiian Islands, and Mexico.

Persons receiving Consular Reports regularly, who change their addresses, should give the old as well as the new address in notifying the Bureau of the fact.

In order to prevent confusion with other Department bureaus, all communications relating to consular reports should be carefully addressed, "Chief, Bureau of Foreign Commerce, Department of State, Washington, U. S. A."

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*Formerly Bureau of Statistics. Name changed to Bureau of Foreign Commerce by order of the Secretary of State, July 1, 1897.

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DAILY CONSULAR REPORTS.

Beginning January 1, 1898, the miscellaneous reports of consular and diplomatic officers upon commerce and industries in foreign countries will be printed immediately after their receipt at the Department of State in the form of ADVANCE SHEETS, heretofore issued at intervals as occasion seemed to require. The change to what will practically be the daily publication of these reports, excepting Sundays and legal holidays, has been ordered by the Secretary of State, with the view to the promptest and widest possible distribution of the commercial information obtained by the Department of State for the benefit of the mercantile and manufacturing interests of the United States. The daily edition is intended especially for the use of the newspaper press, which will thus be enabled to obtain the reports in full with the least delay, the boards of trade, chambers of commerce, associations of exporters and manufacturers, and other organized bodies engaged in the development of our foreign commerce, and of individual firms especially interested in obtaining such data without loss of time. The monthly CONSULAR REPORTS, being a reprint of the ADVANCE SHEETS in convenient form for preservation, will be issued as heretofore. Persons applying for CONSULAR REPORTS should state whether the daily or the monthly edition is desired, as duplication will thus be avoided.

The order of the Secretary of State directing the change is as follows:

DEPARTMENT OF STATE,
Washington, December 7, 1897.

The Chief of the Bureau of Foreign Commerce is hereby authorized to print a special edition of consular reports, to be known as ADVANCE SHEETS, CONSULAR REPORTS, to be issued as soon as possible after the receipt of such reports in the Department, for the benefit of trade organizations, business firms, the newspaper press, etc. This edition is to be printed as frequently as practicable in the form of single reports or series of reports to be numbered consecutively.

JOHN SHERMAN,
Secretary of State.

The reasons for the more frequent publication of the CONSULAR REPORTS are explained in a report to the Secretary of State by the

Chief of the Bureau of Foreign Commerce, which is, substantially, as follows:

DEPARTMENT OF STATE,
Washington, December 7, 1897.

Honorable JOHN SHERMAN,
Secretary of State.

SIR: I have the honor to call your attention to the condition and prospects of the work of this Bureau, formerly the Bureau of Statistics, with the view to its further improvement. The chief function of the Bureau is the collection and publication of diplomatic and consular reports relating to the commerce and industries of foreign countries. Since the publication of the monthly periodical, CONSULAR REPORTS, was begun in 1880, the operations of the Bureau have undergone a process of gradual development, until now, the Department of State, notwithstanding inadequate resources for this purpose, has become a great agency for the dissemination, by means of its own publications, the newspaper press, and correspondence with trade organizations and individual firms, of fresh and reliable information from all parts of the world as to commercial movements, industrial activity, development of new fields of enterprise and the practical application of inventions and scientific discoveries to agriculture, mining, and processes of manufacture. Five distinct classes of publications are now issued by the Bureau of Foreign Commerce, viz:

I. COMMERCIAL RELATIONS OF THE UNITED STATES, in two large volumes, being annual reports from consular officers upon trade and commerce, manufacturing and other industries, finance, customs laws, transportation facilities, etc., with special reference to the opportunities for, or obstacles to, the extension of the sales of United States goods abroad. These reports are summarized in an introduction, which is also printed separately in pamphlet form with the title Review of the World's Commerce, for the convenience of those who wish to obtain a comprehensive view of our trade relations with the world at large, rather than to acquaint themselves with facts and figures in detail.

II. CONSULAR REPORTS, issued monthly, and containing, besides the reports of consular officers, either voluntary or in response to instructions from the Department, a great variety of valuable matter from our diplomatic representatives. It is gratifying to be able to state that there has been a noticeable increase in the activity and interest shown by the embassies and legations, as well as by consular officers, in the collection of useful data for this publication, including statistical documents of foreign governments, which are freely availed of. The effort has been made to restrict

the contents of the monthly issue, as nearly as possible, to matter of practical value to our industries and commerce, for the reason that other Departments and Bureaus of the Government are charged with the publication of much of the information which formerly found its way into the pages of what was expressly intended to be a commercial periodical. Duplication of matter in Government publications and consequent waste and confusion are thus avoided. The contents of the monthly reports, nevertheless, still continue to cover a wide range of subjects. They may be said to describe, with more or less fullness, the industrial activity and progress of the world from year to year. But few, if any, inventions or discoveries of practical importance are omitted in the reports from the leading industrial countries, and a number of instances might be cited of new industries established or improvements in manufacturing processes adopted in the United States as the result of suggestions or information supplied in these monthly reports.

III. ADVANCE SHEETS, CONSULAR REPORTS. These are selected reports, of more immediate interest or importance, from the contents of the monthly issue, which are printed in advance for the benefit of the newspaper press, boards of trade, chambers of commerce and other trade or industrial organizations, bureaus of commercial information, and individual merchants and manufacturers throughout the country, especially such as are engaged in foreign trade.

IV. SPECIAL CONSULAR REPORTS, being series of reports on particular subjects, prepared under special instructions from the Department. The titles of some of them—such as Tariffs of Foreign Countries, Port Regulations in Foreign Countries, Canals and Irrigation, and Money and Prices in Foreign Countries—sufficiently indicate their general character.

V. DECLARED EXPORTS. This is a quarterly publication, giving the articles exported to the United States and their invoice values as declared at the various consulates throughout the world.

For some time past, the fact has been fully recognized that the element of timeliness in getting these reports before the public is of great importance. To this end, every effort has been made to secure the utmost promptitude in publication in the order of their relative value, and in spite of the embarrassment caused until quite recently by an insufficient working force and a meager appropriation, a steady and, I trust, substantial improvement has been effected. Complaints of tardy publication, which, under old conditions, was in many cases unavoidable, are no longer received, and within the past two years, commendation of the celerity with which the reports are printed has come from so many quarters that the Department may be considered as responding satisfactorily to the demands upon it for this class of

information, though the capabilities of its service to commerce and manufactures are still but imperfectly developed.

The actual degree of progress attained is best exemplified by the fact that, as long ago as June, 1895, it had excited the attention of the British chambers of commerce, and, during the past year, it has elicited many complimentary expressions from leading financial, commercial, and industrial journals of Great Britain. In all of these comments, the practical value of the reports of United States consular officers and the promptness with which they are printed and distributed are the points especially dwelt upon. In a circular letter to the chambers of commerce of the United Kingdom, June 19, 1895, the executive council of the associated chambers stated that its attention had been directed "to the action taken by the Government of the United States and by other governments by means of special consular reports, in order to supply their traders with information up to date with regard to openings for business in foreign countries," and the opinion was expressed that the practical value of the reports of British consuls "would be much increased if they afforded more direct and early suggestions and details with respect to trade questions of present interest." The local chambers of commerce were, therefore, invited to make suggestions as to trade inquiries by consuls for submission to the Foreign Office. In the responses to this circular, a variety of changes were proposed for the improvement of the commercial work of the British consular service. At the meeting of the Bradford Chamber of Commerce, the statement was made that United States consuls "did a great deal more" for the extension of trade than British consuls did. The Cardiff chamber complained of the delay in printing the British consular reports. The Hull chamber thought the reports of British consuls should be given to the public as promptly as possible, "if necessary, even by telegraph." The Newport chamber replied to the effect that trained business men should be selected as consuls, and that it was desirable that the system of the United States Government in instructing its consular representatives "to report exhaustively upon trade and commerce, either in their isolated or general phases or developments," should be adopted. These responses were submitted to the British Foreign Office, which, on the 7th of August, 1896, answered the various criticisms and recommendations in an elaborate statement, in which it was asserted that the consular reports were issued "with all possible expedition after their receipt," and that the telegraph was invariably used for the transmission of information of immediate importance. Delays were explained by the statement that reports, after having been put into type, were, whenever possible, returned to the consuls with printers' proofs for correction—a practice, it may be remarked, which is

not followed in publishing the United States consular reports, because of the loss of time necessarily involved. Another reason for the belated character of many of the British reports is to be found in the fact that the consuls do not make their reports, as a rule, oftener than once a year, and even then, they wait until "the necessary statistical data are available in foreign countries." United States consuls, on the other hand, report promptly upon any subject they may think timely and valuable to commerce and industries at home. Even in the preparation of their annual reports, they are required to furnish all the information they can collect from reliable sources by a given date without reference to official statistics, if the latter are not then at hand. This difference in methods would alone serve to explain the elements of superiority in the United States system which seem to commend it so strongly to British trade bodies.

[Here follow extracts from leading trade journals of Great Britain, such as the Iron and Coal Trades Review, March, 1897; the London Financial News, April 17, 1897; the British Trade Review, July 1, 1897; the British Trade Journal, June 1, August 1, and October 1, 1897; the Textile Manufacturer, of Bradford, September 15, 1896; the Consular Journal, of London, September 16, 1897, etc., urging greater promptitude in collecting and publishing British consular reports and the adoption of the salient features of the United States system.]

If we take into consideration the fact that it is only within a recent period that our manufacturers have turned their attention seriously to the export trade and that the consular officers have received the stimulus of such activity, supplemented by special instructions from the Department of State, the results which I have endeavored to indicate would seem to be remarkable. They are such as, in my judgment, foreshadow a great future of usefulness for our diplomatic and consular representatives in extending the sales of every class of American goods, as well as of raw products, abroad. The average American is almost sure to have the business instinct well developed, and added to this is a spirit of enterprise and an energy and dash which give him a great advantage in competition with the slower and more cautious traits of the average European. These are the qualities which, in my judgment, have given the consular service of the United States the superiority so freely admitted by the best opinion in Great Britain. What has actually been accomplished, gratifying though it be, seems to me but an indication of what may easily be done. Thus far, this Bureau has had to work under great disadvantages, and I respectfully call attention to the importance of liberal provision for future development in the interests of American commerce, to which our industries must look for the distribution of their

surplus product. The Bureau, even with its present facilities, has reached the point of reducing, as far as possible, the obstacles and delays to prompt distribution of the information which comes, in steadily increasing volume, from all quarters of the globe. This information is given immediately to the newspaper press, which, through the different news agencies and special correspondents, disseminates the information by telegraph and mail all over the country. The reports are printed as promptly as possible in the monthly publication, CONSULAR REPORTS. A great mass of information is sent out from the Bureau of Foreign Commerce by correspondence in answer to inquiries from individuals and business firms. This latter branch of the work has developed so greatly that the Bureau feels the need of a competent staff to classify data and respond to such inquiries with the least delay. A Division of Information is one of the pressing necessities of the work.

For the present, however, I confine myself to a recommendation which will enable the Bureau to still further minimize the delay in printing and circulating the reports. By a simple and inexpensive change in the methods of publication, it will be possible to print the reports day by day as they come into the Department, and issue them promptly for the benefit of the newspaper press and trade bodies, as well as individual manufacturers and merchants, who are constantly writing to the Department for advance copies of particular reports. It has been the practice of the Bureau, for some time, to issue those of the reports which are of more immediate value in the form of ADVANCE SHEETS, for the special benefit of the classes indicated above. It is difficult, however, to determine in advance the extent of the demand for any particular report, and in order that all requests may be complied with without inconvenience or delay, I have the honor to request your approval of the accompanying order, which authorizes this Bureau to print all reports, as they are received, in a special edition to be known as ADVANCE SHEETS, CONSULAR REPORTS. These ADVANCE SHEETS can be numbered consecutively, with titles by subjects, and by means of a card catalogue, it will be possible to respond to a demand for a particular report at any time. The reports, at the end of each month, can easily be collected and classified for printing in the monthly form, as at present. This latter publication would still be useful for reference purposes and for all those who do not attach importance to the early receipt of the data it contains.

The proposed change involves an increased cost of only about twelve hundred dollars per annum, owing to the fact that the additional expense will be merely that of paper and presswork, and, perhaps, additional help in the mailing department. The change, on

the other hand, will insure economy and promptness in answering requests for information and in supplying the newspaper press (a most important agency for the distribution of this information) with the full reports of the consuls at the earliest possible moment, and will encourage consular officers, by the speedy publication of their reports, to put forth their best efforts in this direction. As to the latter result, I may remark that the increase of interest among consular officers in the commercial work of the Department is very perceptible of late, and that the annual reports to be printed in COMMERCIAL RELATIONS, which I hope to have ready by the 1st of January, 1898, promise to be superior to any that have yet been obtained. If the proposed system be adopted, I am satisfied that the Department will have exhausted the possibilities of prompt publication and efficient distribution of commercial reports, and that we need fear no possible rivalry on this point from any of our competitors for foreign trade. If the present work of the consular service in transmitting commercial information by mail could be supplemented by the use of the cable when necessary, in order to advise American manufacturers and merchants of important events in industry and commerce, nothing, it seems to me, would be left to be desired in this branch of the work. It will, of course, be for Congress to determine whether provision shall be made for such extension of the present system, and also for additional facilities which are sorely needed for the development of other features of the work.

Respectfully yours, FREDERIC EMORY,
Chief, Bureau of Foreign Commerce.

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VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to April 1, 1898, have been prepared to assist in computing the values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz, (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*	Gold and silver	Peso	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†	Gold	Crown	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver	Franc	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil	Gold	Milreis	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	do	Dollar	1.00	
Chile	do	Peso	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica	do	Colon	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver	do	.92,6	Gold—doubloon ($5.01,7); silver—peso.
Denmark	Gold	Crown	.26,8	Gold—10 and 20 crowns.
Egypt	do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland	do	Mark	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver	Franc	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark	.23,8	Gold—5, 10, and 20 marks.
Great Britain	do	Pound sterling	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece	Gold and silver	Drachma	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	do	Gourde	.96,5	Silver—gourde.
Italy	do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire silver—5 lire.
Japan‡	Gold	Yen	.49,8	Gold—1, 2, 5, 10, and 20 yen.
Liberia	do	Dollar	1.00	
Netherlands§	Gold and silver	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar	1.01,4	Gold—$2 ($2.02,7).
Portugal	do	Milreis	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖	do	Ruble	.77,2	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain	Gold and silver	Peseta	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway	Gold	Crown	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver	Franc	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela	Gold and silver	Bolivar	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

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* In 1874 and 1875, the gold standard prevailed in the Argentine Republic.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ended July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

‡ For particulars as to the change from silver to the gold standard, see CONSULAR REPORTS No. 201, p. 259.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

‖ Russia: Gold the nominal standard; silver the actual standard.—*Note by the United States Treasury.* See, also, review of Russian industries and commerce by the Russian Minister of Finance in "Review of the world's commerce," Commercial Relations of the United States for 1895-96, p. 230.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6	....	....
China	Silver	Haikwan tael	1.61	1.61	....	....	....	....
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	....	....	4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	....	....
	Silver		....	....	....	....	.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	....	....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso	....	....	....	.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	....	....	.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

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* The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

† The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1895.				1896.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.45,5	$0.44,1	$0.48,6	$0.48,6	$0.49,1	$0.49,3	$0.49,7	$0.49
Central America.	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
China	Amoy tael	....	....	....	....	....	....	....	.79,3
	Canton tael	....	....	....	....	....	....	....	.79
	Chefoo tael	.70,4	.68,3	.75,1	.75,2	.75,9	.76,3	.76,9	.75,8
	Chinkiang tael	....	....	....	....	....	....	....	.77,4
	Fuchau tael	....	....	....	....	....	....	....	.73,3
	Haikwan tael	.74,9	.75,6	.80	.80	.80,8	.81,2	.81,9	.80,6
	Hankow tael	....	....	....	....	....	....	....	.74,2
	Ningpo tael	....	....	....	....	....	....	....	.76,2
	Niuchwang tael.	....	....	....	....	....	....	....	.74,3
	Shanghai tael	.67,3	.65,2	.71,8	.71;8	.72,5	.72,9	.73,5	.72,4
	Swatow tael	....	....	....	....	....	....	....	.73,2
	Takao tael	....	....	....	....	....	....	....	.79,8
	Tientsin tael	.71,4	.69,2	.76,1	.76,2	.76,9	.77,3	.78	.76,8
Colombia	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Ecuador	do	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
India	Silver rupee	.21,6	.21	.23,1	.23,1	.23,3	.23,4	.23,6	.23,3
Japan	Silver yen	.49,1	.47,6	.52,4	.52,4	.52,9	.53,2	.53,2	.52,8
Mexico	Silver dollar	.49,5	.47,9	.52,8	.52,8	.53,3	.53,6	.54	.53,2
Persia	Silver kran	....	....	.08,9	.09	.09	.09,1	.09,2	.09
Peru	Silver sol	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Russia	Silver ruble	.36,4	.35,3	.38,9	.38,9	.39,3	.39,5	.39,8	.39,2
Tripoli	Silver mahbub	.41,1	.39,8	.43,8	.43,8	.44,3	.44,5	.44,9	.44,2

Countries.	Monetary unit.	1897.				1898.	
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.
Bolivia	Silver boliviano.	$0.47,4	$0.46,8	$0.44,3	$0.41,2	$0.42,4	$0.40,9
Central America	Silver peso	.47,4	.46,5	.44,3	.41,2	.41,4	.40,9
China	Amoy tael	.76,7	.75,7	.71,7	.66,4	.68,5	.66,2
	Canton tael	.76,5	.75,5	.71,5	.66,4	.68,3	.66
	Chefoo tael	.73,3	.72,4	.68,6	.63,7	.65,5	.63,3
	Chinkiang tael	.74,9	.73,9	.70	.65,1	.66,9	.64,6
	Fuchau tael	.70,9	.70	.66,3	.61,6	.63,4	.61,2
	Haikwan tael	.78	.77	.73,1	.67,8	.69,7	.67,3
	Hankow tael	.71,7	.70,8	.67,1	.62,3	.64,1	.61,9
	Ningpo tael	.73,7	.72,8	.68,9	.64	.64,3	.63,6
	Niuchwang tael.	.71,9	.71	.67,2	.62,5	.65,9	.62
	Shanghai tael	.70	.69,1	.65,5	.60,8	.62,6	.60,4
	Swatow tael	.70,8	.69,9	.66,2	.61,5	.63,3	.61,1
	Takao tael	.77,2	.76,2	.72,2	.67	.66	.66,6
	Tientsin tael	.74,3	.73,4	.69,5	.64,6	.66,4	.64,1
Colombia	Silver peso	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9
Ecuador	do	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9
India *	Silver rupee	.22,5	.22,2	.21,1	.19,6	.20,1	.19,1
Japan	Silver yen	.51,1	.50,5	....	....	....	....
Mexico	Silver dollar	.51,5	.50,8	.48,2	.44,6	.46	.44,4
Persia	Silver kran	.08,7	.08,6	.08,2	.07,6	.07,8	.40,9
Peru	Silver sol	.47,4	.46,8	.44,3	.41,2	.42,4	....
Russia	Silver ruble	.37,9	.37,4	....	....	....	....
Tripoli	Silver mahbub	....	....	....	....	....	....

* The value of the rupee to be determined by consular certificate.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Dun	Japan	1 inch.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	4 yards.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Kota	Japan	5.13 bushels.
Korree	Russia	3.5 bushels.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	11⅜ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; Inch planks, 600 superficial feet.
Manzana	Costa Rica	1½ acres.
Do	Nicaragua and Salvador	1.727 acres.
Marc	Bolivia	0.507 pound.
Maund	India	82 2/7 pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Milla	Nicaragua and Honduras	1.1493 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	3.6 feet.
Seer	India	1 pound 13 ounces.
Shaku	Japan	10 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.
Vara	Argentine Republic	34.1208 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Castile	0.914117 yard.
Do	Central America	32.87 inches.
Do	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

THE BUREAU OF FOREIGN COMMERCE.

From and after July 1, 1897, the Bureau of Statistics, Department of State, will be known as the Bureau of Foreign Commerce, in accordance with the following order of the Secretary of State:

DEPARTMENT OF STATE,
Washington, July 1, 1897.

Under the authority conferred upon me by chapter 268, United States Statutes at Large, Fifty-fourth Congress, second session, under the heading "Publication of Diplomatic, Consular, and other commercial reports," the name of the Bureau of Statistics of this Department is hereby changed to the Bureau of Foreign Commerce, and the title of the Chief of the Bureau of Statistics shall hereafter be Chief of the Bureau of Foreign Commerce.

JOHN SHERMAN,
Secretary of State.

The reasons for the change are set forth in the following report from the Chief of the Bureau of Statistics to the Secretary of State:

DEPARTMENT OF STATE,
Washington, June 30, 1897.

Honorable JOHN SHERMAN,
Secretary of State.

SIR: I have the honor to call your attention to the clause in the diplomatic and consular appropriation bill for the fiscal year ending June 30, 1898, approved February 20, 1897, which provides for the publication of diplomatic, consular, and other commercial reports. (See page 590, United States Statutes at Large, Fifty-fourth Congress, second session.) The paragraph reads as follows:

> Preparation, printing, publication, and distribution, by the Department of State, of the diplomatic, consular, and other commercial reports, twenty-five thousand dollars; and of this sum the Secretary of State is authorized to use not exceeding three thousand one hundred and twenty dollars for services of employees in the Bureau of Statistics, Department of State, in the work of compiling and distributing such reports, and not exceeding two hundred and fifty dollars in the purchase of such books, maps, and periodicals as may be necessary to the editing of diplomatic, consular, and other commercial reports: Provided, That all terms of measure, weight, and money shall be reduced to, and expressed in, terms of the measure, weight, and coin of the United States, as well as in the foreign terms; that each issue of consular reports shall not exceed seven thousand copies: And provided further, That the Secretary of State be, and he is hereby, authorized to change the

name of the Bureau of Statistics to the Bureau of Foreign Commerce, and that the foregoing provision shall apply with the same force and effect to the Bureau of Foreign Commerce as to the Bureau of Statistics.

You will perceive that the Secretary of State is authorized by the foregoing to change the name of the Bureau of Statistics of this Department to the Bureau of Foreign Commerce, and that the provision for the maintenance of the Bureau of Statistics is made to apply with the same force and effect to the Bureau of Foreign Commerce. As the appropriation becomes available on the 1st of July, I respectfully ask authority from you to carry the legislation specified into effect. The reasons for making the change, as stated to Congress and approved by that body, are:

(1) The confusion arising from the fact that there are three bureaus of statistics in the Executive Departments, viz:

Bureau of Statistics, Department of State;
Bureau of Statistics, Treasury Department;
Division of Statistics, Department of Agriculture.

Shortly after taking charge of this Bureau, I became impressed with the fact that the general public was unable to discriminate between the various bureaus of the same name, and that unnecessary labor and delay resulted.

(2) The name Bureau of Statistics does not properly denote the functions of this Bureau, which is exclusively commercial in its character, its work being that of collecting, compiling, and distributing the commercial reports of our diplomatic and consular officers. There is a wide range of statistics with which the Bureau has nothing to do, and its designation as a Bureau of Statistics is, therefore, misleading. The use of the words Bureau of Foreign Commerce, on the other hand, besides correctly indicating the character of the work, is likely, in my judgment, to impress upon the public mind the importance of the commercial functions of this Department.

In view of these considerations, I submit the draft of an order for your signature.

Respectfully yours,

FREDERIC EMORY,
Chief, Bureau of Statistics.

CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

Vol. LVII. AUGUST, 1898. No. 215.

THE WORLD'S PRODUCTION AND CONSUMPTION OF COFFEE.

VARIETIES OF COFFEE AND COFFEE TREES.

Of the twenty-two varieties of coffee plants (a rubiaceous plant whose original habitat was Abyssinia), seven belong to Asia, eleven to the west coast of Africa, two in Central and East Africa, and two in Mauritius. Among the different varieties, the following may be enumerated: Arabian, Mocha, Myrtle, Aden and Bastard, Moorish; Marrou, of Réunion; Monrovian, coffee of Gaboon; Saurine, yellow coffee (café amarello), red coffee (café vermelho), and the common coffee of Mexico and Central and South America. All these varieties are variously subdivided, taking their names from the districts where they are produced or from ports whence they are shipped. For example, Brazil coffees are Rio, Santos, Bahia, Ceara, etc.

The ordinary coffee shrub is an evergreen plant that grows to a height of about 20 feet, with oblong, ovate leaves. The fruit is a fleshy berry, having the appearance and size of a small cherry. Each fruit contains two seeds, embedded in a yellowish pulp, the seeds being inclosed in a thin membranous endocarp.

REGIONS SUITABLE TO COFFEE CULTURE.

The regions best adapted to the cultivation of coffee are well-watered mountain slopes, at an elevation of from 1,000 to 4,000 feet above sea level, in latitudes lying between 15° north and 15° south, although it is cultivated with success from 25° north to 30° south of the Equator, where the temperature does not fall below 55° F. Frost is a deadly enemy of the plant, and excessive heat hinders its normal growth. The low, hot lands of Mexico, the Caribbean Sea region—which produces the best cocoa in the world—and the South Atlantic are not adapted to its culture, the coffee lands in all these regions being found on the highlands that rise from the sea. On the American continent, coffee is produced all the way from Paraguay to Mexico; the Argentine Republic, Chile, the United States, and Canada being either too far north or south for its growth.

The shape, size, and color of the seeds are the points that determine the commercial value of coffee. The shape depends upon the particular part of the plant upon which the seed grows, the size upon the nature of the locality of the growth, and the color on the degree of maturity of the fruit at the period of gathering the crop.

Brazil is the great coffee country of the world, being credited with 66 per cent of the total product. Nearly all the twenty States that form this vast mesopotamia extending from the Amazon to the River Plate produce coffee; but the true coffee zone is confined to the States of Rio de Janeiro, São Paulo, Espirito Santo, and Minas Geraes, São Paulo being the banner coffee State. This coffee finds its outlet at the ports of Santos, Rio de Janeiro, and Victoria.

COFFEE IN SÃO PAULO.

A few words as to the cultivation, harvesting, preparation, grading, marketing, and exporting of coffee from the State of São Paulo.

Plantations.—Plantations are usually made on hillsides—the plant growing even in crevices of rocks—plants being placed at intervals of 10 or 15 feet. Hillsides are preferred, because less subject than low lands to frost. At the age of four years, the tree begins to bear; it reaches its best at ten years, but continues to bear up to twenty and even thirty and forty years. The life of a plantation properly cared for is, however, about thirty years. Frosts and droughts damage crops here; insects very little.

Harvesting the crop.—The first flowering appears in September, and the berry ripens in April or May, when the gathering of the crop begins. The berries are stripped by hand. The berry contains two grains, with the flattened sides toward each other, each covered with an inner membrane called pergaminho, and a thicker outer coat called casquimho, and the outside tough rind or shell, casco. To remove these coverings, the berry is passed through the despolpadar, after having been washed in shallow cisterns. It is then dried—either spread out on a cement-covered pavement, called terreiro, in the sun, which is the old way, requiring about two months, or by the modern method of steam, which is used on the large fazendas, or plantations. After drying, the coffee, still inclosed in the inner and outer skins, is passed through machinery to prepare it for marketing. This machinery is supplied for the most part by the Lidgerwood Manufacturing Company, and the Campanhia Mechanica, of São Paulo, and consists of the ventilador or windmill, brunidar or descascador, and polisher or sheller.

Marketing the crop.—The crop begins to reach Santos about May, the largest receipts being credited to the latter part of the second semester of the year. Formerly, the planter sent his product to Santos in bags of any size, and the commissario (his agent, a very important man in the coffee business), placed it in the standard coffee sack of 60 kilograms (132.276 pounds) for export. In Rio de Janeiro there is still a class of middlemen called ensaccadores, who buy from the commissario and sell to the exporter, reaping a profit on the resacking. In this State, on the contrary, the planter sacks his own coffee in the regulation sack. The commissario, who is accustomed to advance large sums of money on growing crops, receives, besides interest on these loans, a profit of 3 per cent for his intervention in receiving the coffee and selling it to the exporters. This sale is made by a coffee broker, who receives 75 reis (1.05 cents) per bag from both buyer and seller. It will be perceived that the commissions of some of the leading brokers on large sales made daily afford a very comfortable income. The last man to be considered here is the exporter or his agent. He is, of course, the natural business enemy of the others, as he represents foreign interests who are desirous of buying as cheaply as possible, and he wishes to obtain a margin. Some of the large export houses, as Naumana, Gepp & Co., Zenner, Bulow & Co., and Goetz, Hayn & Co., buy direct to some extent from the planters, thus cutting off all middlemen.

Business methods.—A publication of the National Association of Manufacturers has the following on the methods of doing business at Rio de Janeiro and Santos:

> Rio de Janeiro and Santos are the principal ports from which coffee is shipped. The manner in which the coffee business is conducted in Rio is somewhat different from the method followed in Santos, and a few remarks on the subject may be of interest. In Rio the "commissarios," or planters' agents, sell to the "ensaccadores," or intermediaries, who classify and sack the coffee. Each coffee-exporting firm employs its own brokers to buy from the intermediaries. The broker's interest, therefore, is to act solely on behalf of the exporter, and, as he is well posted on the stock and requirements of the market, and as the intermediaries have the coffee ready for sale, duly classified, he can generally procure the exact number of bags of any type he may be instructed to purchase.
>
> It is not so in Santos. There the planters' agents sell direct to the exporting houses, employing their own brokers. The latter's interest is, therefore, with the growers. The coffee is not classified as in Rio, but is simply sold in lots. An exporter, who has to execute an order for a certain type of coffee, may have to buy in

excess of his needs, in order to be able to separate and obtain the quality and quantity required. The remainder, should it not be of a standard suitable for shipment, must be disposed of in the market. In either case, the exporter naturally regulates his invoices so as to cover any loss the transaction may entail. It will be seen that with greater capital and the employment of thorough experts to buy the coffee, the Santos market offers every inducement to exporting houses. They would not only save profits, by saving the intermediaries' commission, but often, by careful selection and judgment in shipping, surpass their expectations.

Coffee grading.—Coffees are graded in this market as follows:

Fine. Consisting of clean coffee of regular bean.

Superior. Beans regular in size, but may contain a few husks or black beans, called "quakers"—sticks, stones, and dirt not allowed.

Good. Evenness of bean not absolutely insisted upon; may be black beans or husks, and even a few broken beans. Sticks, stones, and dirt excluded.

Regular. In this grade defects appear, large quantities of black beans, hulls, stones, sticks, or dirt.

Ordinary. Contains foregoing defects and some broken beans.

Triage, the last or lowest of grades, is made up of broken beans and has all the other defects enumerated.

In the vernacular (Portuguese) these six grades are fino, superior, bom, regular, ordinario, and escolha. The berry is sometimes colored before shipment and sometimes milled. The export firm of Rose & Knowles is successful, and another mill is being built whose owner proposes to mill 500,000 bags (66,000,000 pounds) a year. Coffee for the Cape of Good Hope, for example, is artificially colored black to meet the taste of that market. There are two classes of beans—flat and round—and this determines the classification of the berry. The former is the Java, the latter the Mocha type. The round pea-berry, or Mocha type, represents 3 to 6 per cent of the production. It is graded to-day 2 milreis above the "base" or standard price. The same tree produces both varieties.

Mocha.—The Brazilian resents the current idea which prevails in foreign countries that there is better coffee than that of Brazilian origin. He knows that the "Java and Mocha" of the American market is, in large part, grown near Rio de Janeiro or São Paulo. Mr. W. G. Palgrave, the British minister resident at Montevideo, an Orientalist and famed traveler, who died some years ago, said:

> The best coffee, let cavilers say what they will, is that at Yemen, commonly entitled Mokha, from the main port of exportation. Now, I should be sorry to incur a lawsuit for libel or defamation from our wholesale or retail tradesmen; but, were the particle not prefixed to the countless labels in London shop windows that bear the name of the Red Sea haven, they would have a more truthy import than they convey at present. Very little—so little, indeed, as to be quite unappreciable—of the Mokha, or Yemen, berry ever finds its way westward of Constantinople. Arabia itself, Syria, and Egypt, consume fully two-thirds, and the remainder is almost

exclusively absorbed by Turkish and Armenian esophagi. Nor do these last get for their share the best and purest. Before reaching the harbors of Alexandria, Jaffa, Beirut, etc., for further exportation, the northern bales have been, while on their way, sifted and resifted, grain by grain, and whatever they may have contained of the hard, rounded, half-transparent, greenish-brown berry—the only one really worth roasting and pounding—has been carefully picked out by experienced fingers; and it is the less generous residue of flattened, opaque, and whitened grains which alone, or almost alone, goes on board the shipping. So constant is the selecting process that a gradation, regular as the degrees in a map, may be observed in the quality of the Mokha, that is, Yemen, coffee, even within the limits of Arabia itself, in proportion as one approaches to, or recedes from, Wadi Nejran and the neighborhood of Mecca, the first stages of the radiating mart.

Tendency of production.—There has just been published at São Paulo a volume by Joquim Franco Lacerda, a well-known merchant, on coffee production and consumption, mainly from the standpoint of statistics bearing on the economic and financial situation of Brazil. As the writer is not animated by the spirit of the investigator or economist, and suggests as a remedy for the ills which plague the State of São Paulo at present the establishment of a mortgage bank, in which as a practical business man he is interested, too much weight can not be attached to his views; and his marshaling of figures to show that there is no excess of production of coffee in the world must be carefully scanned and corrected by data gained from other sources. However, as the work is written distinctly from the local Brazilian point of view, and the method adopted is not unlike that of the Minister of Finance of the Republic in his last annual report, from which I quoted copiously in a late report on the State of São Paulo,* the contribution is valuable.

It is interesting to note the tendency of the course of production in all parts of the globe. As a rule, a good yield for several years is followed by a rapid falling off each subsequent year, up to the point of ceasing to yield. Thus we see in Ceylon (exploited by the English) the exportation rise to 892,454 bags in 1869–70, and decline rapidly year after year, being now reduced to about 50,000 bags annually. In Java, Padang, Macassar, etc., where the product reached its height in 1883 (1,787,342 bags), we now find the production reduced to one-half that amount. In Central America, a very sensible decline has set in during the last three years, and it promises to become still more accentuated, according to reports sent to Europe and published by Duuring & Zoon on June 1 last year. The same thing is observed in the States of Rio de Janeiro, Minas Geraes, and Espirito Santo, in Brazil, where the diminution has reached considerable figures in virtue of the abandonment of old trees. The exportation from Rio de Janeiro rose to 4,209,200 bags (555,614,400 pounds) in 1884–85, from which time a decline has set in, until the crop remains stationary, Mr. Lacerda putting it at about 2,750,-000 bags (363,000,000 pounds) annually. During the current year there was a better production, due to the excellent condition of planting in Minas Geraes and Espirito Santo. The exportation from Rio de Janeiro, during the calendar year ended December 31, 1897, was 3,905,000 bags (515,460,000 pounds). The production of Bahia and Ceara has increased during late years; but the additional supply is not important, considered in relation to the immense quantities exported from other points. It is in the State of São Paulo that we find the greatest increase in production. Besides the amount shipped from Santos, the dock authorities at Rio de Janerio, in their late returns, show that, of the exportation named above for 1897, 300,000 bags (39,600,000 pounds) were of São Paulo origin. The writer attributes the increase of production in this State to exceptional causes—the opening up of vast and hitherto, from a market point of view, inaccessible tracts, by the great extensions of the Paulista, Mogyana, Rio Clarense, Sorocabana and Ituana railway lines (the first of which has just declared a dividend of 20 per cent), and the inflow of a great current of immigration during the last decade, calculated at 1,000,000 souls, foreign and native. The great activity, which has attained such an impetus of late years, had its inception in 1870, when new plantations were begun in every part opened up by railways. Up to that time, even in epochs of high prices, the profits disappeared when it cost, as in Venezuela, in some sections, $5 to $7 in United States gold (per bag) to get the product to market. To-day, while rates differ according to distance, a high average freight charge would be 5 milreis per bag of 132 pounds. Besides the enormous southern European immigration, many agriculturists have come in since 1870 from Rio de Janeiro and Minas Geraes and northern provinces, bringing laborers and establishing considerable new centers of production.

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* Printed in Commercial Relations for 1897.

Productive age of coffee trees.—The production of coffee, as well as the life of the tree, in the State of São Paulo depends on the quality of the land and the plant. There are said to be coffee trees producing to-day at the age of seventy-five years. A gentleman resident here states that 1,000 trees yield 100 arrobas (3,238 pounds), or 25 bags, while in the province of Rio de Janeiro the yield is half that amount. The proper coffee soil is the terra roxa (red earth), which is red clay, about 4 feet deep, with a gravel subsoil. The method followed in planting has much to do with the product, and in no country in the world, particularly since the abolition of slave labor in 1888 and the substitution therefor of properly-fed and cared-for colonists, is more care paid to production. The plow as well as the hoe is being used, and machinery from the Lidgerwood (American) and McHeardy companies, and the Campanhia Mechanica, of São Paulo, is used for all purposes save the plucking of the berry from the tree. São Paulo is a State of large plantations. The absence of a land tax and the cost of 10 per cent on land sales have retarded the democratization of the soil. That coffee is still profitable, notwithstanding prevailing low prices and the unprecedented depreciation in exchange (the milreis being quoted at about 7d., or 14 cents, against 27d., or 54 cents, par value), is shown by the fact that one of the leading firms here has orders from European clients to purchase all plantations offered. I am informed that planting would still be lucrative to the planter in case coffee should fall to 6 milreis (84 cents) per 10 kilograms (22.046 pounds). It is now quoted at 9 milreis ($1.26). In the absence of careful Government surveys, and the current carelessness in regard to quantity—"mars o menos" (more or less), being about as near an opinion as anybody here ventures to express—one can not even approximate an estimate of the soil under coffee cultivation, nor the probability of its future extension. There are "bulls and bears," and everybody has his opinion, which in many cases he backs in the speculative market. The large firms have correspondents in all parts of the coffee belt, or send men in their employ from here to look over the field. All these things are in limbo, and will be until the Government establishes statistical bureaus equipped in a manner commensurate with the great future of the country and the large interests at stake. It may be assumed that one-third of the coffee trees of the State of São Paulo are planted in lands of the first quality, one-third in that of second quality, and the remainder in land that may be classed as of third quality. Lands of the first quality produce even up to fifty years and in some cases beyond, as I have before stated; lands of the second quality produce up to thirty and thirty-five years; and lands of the third quality, up to fifteen and twenty years. All these lands are virgin soil, never manured, except by decaying matter growing side by side with the coffee tree or in the interstices of the rows of trees, the rotation being here, as Professor Derby, of the Geological Survey, has said, not, as in Europe and North America, with useful crops, but with jungle. The common coffee plant has more duration than the plant called here "bourbon." In general, bourbon coffee produces at an earlier period than ordinary, and the yields are more abundant during the first fifteen years, from which time onward the trees suffer much, and production is gradually reduced. This variety in lands of the second and third qualities breaks up quicker than the common coffee plant.

Soil and climate.—Coffee can be cultivated in this State as far down as 23½°, the section south of that parallel being very cold. Of the two zones, or belts, the temperate extends from latitude 22° to 23½°, and the hot from 20° to 22°. Temperature, of course, exercises a commanding influence in the formation and production of the coffee tree. In a hot climate the tree forms rapidly, while in a cold climate replanting is necessary, and the trees are developed only after much labor. I may say at this point that the tree is propagated here in three ways: (*a*) By seed planted in the soil; (*b*) by slips, called "mudas" (transplanted on reaching 6 or 8 inches), grown in what may be termed a nursery, where shade from the subtropical sun and the necessary moisture are attainable; and (*c*) by planting ends of branches about 8 inches long in soil to a depth of about 6 inches. The last-named methods (*b* and *c*) are the most approved. In a hot climate the production is most abundant the first years, reaching a point so excessive in some years as to damage the tree and render it barren the following year. In general, a coffee tree has some years of exceptional production, which leaves results the effect of which is seen for some years following. In a cold climate the production is more regular and less abundant and endures longer, for continued large crops soon exhaust the trees. The large plantations made in 1870 and the years following were for the most part in the west of São Paulo. The present large production of that region will continue for some years to come, due to the planting of new trees during the last ten years, which will compensate for the natural decrease in production of the trees which are growing old. The product of the old plantations is losing importance every day. Notwithstanding that the trees in some sections conserve a certain vitality, the crop is very small, and the planter would do well to abandon their cultivation or substitute new plants therefor, as is customary here at the end of the bearing period, say, thirty years.

Outlook for coffee production.—Mr. Lacerda thinks that the low price of coffee—9 milreis per 10 kilograms, or 54 milreis per bag of 132 pounds, equal to $7.56 United States gold per bag, or 5.7 cents per pound—during the last year will cause a cessation of planting new trees. I doubt this, and am led to think that in the favored coffee districts of Riberão Preto, etc., planting is constantly going on and on a large scale, although low prices and low exchange are, of course, deterrents. The whole matter of prices lies in the question whether or not there is an excess of coffee production in the world. It seems to me that the production of the world has outrun its consumption, and, unless new markets are opened and its use in old ones extended by propaganda, as has been attempted in Russia, and by the abolition of the heavy import dues that burden it in most European States where it finds acceptance, thus making more easy its extended use, the price will decline further and stay down. The case appears to be similar to the question of wheat prices. There are vast quantities of land in various parts of the world where both staples may be grown; no particular aptitude is required in the laborers who produce either; the existence of steamship lines plying to every corner of the earth, equalizing freight rates and bringing the remotest sections within easy distance of central distributing markets; the ramification of railways through the producing countries, the cheapening in rates of money, the diminution of returns expected on capital invested, and the use of machinery and intelligent labor in place of the hand labor of slaves—all render cost of production and of reaching a market much less than was dreamed of a few years ago. Yet, our São Paulo writer contends that coffee should and may be expected to sell again at £4 ($19.47) per bag, instead of £1 10s. ($7.30) as at present; and there is a feeling here that all people who do not so think are in some way inimical to the industry.

Status of planters.—The present situation of the planters is thus considered by Mr. Lacerda:

> One-third is free of debt, and forms a capitalist class; another third enjoys good credit and can liquidate debts in two or three years if coffee maintains a reasonable price; finally, the others suffer from debts, due to having bought properties at an excessive valuation, without judgment, or to having put out large sums of money in developing their plantations or indulged in speculation or luxurious living. Among planters who find themselves in financial difficulties are those who have made large investments which have not yet begun to yield returns, as well as those who bought properties believing in the continuation of high prices.

Production of coffee in the State of São Paulo.

Years.	Production.	
Fiscal years:	*Bags.*	*Pounds.*
1850–1860	1,400,000	184,800,000
1860–1870	3,400,000	448,800,000
1870–1880	6,700,000	884,400,000
1880–1890	18,000,000	2,376,000,000
1890–1896	22,700,000	2,996,400,000
Total for forty-six years	52,200,000	6,890,400,000
Calendar years (estimated):		
1897	4,000,000	528,000,000
1898	5,000,000	660,000,000
1899	4,000,000	528,000,000
1900	5,000,000	660,000,000

The production of the year 1896–97 (crop year ends June 30) was abundant in the hot zone and small in the temperate; but the production of 1897–98 will show the opposite. It is in the hot zone that the great plantations are established; hence the crop years of large results occur when the hot zone produces well. The future crop will be light. São Paulo has reached its zenith as a coffee producer, and within five years a decline will set in by reason of old coffee trees going out of bearing.

COFFEE STOCKS ON HAND, AND PRICES.

Mr. Lacerda gives the following figures as showing the stocks of coffee on hand in Europe and the United States on the dates given:

Year.	Quantities.		Price per pound.*
	Bags.	*Pounds.*	*Cents.*
1894 (on December 31)	1,496,000	197,472,000	15 to 18.25
1895 (on December 31)	2,185,200	288,246,400	15.36 to 16.98
1896 (on December 31)	2,186,000	288,552,000	10.11 to 15.58
1897 (on June 30)	1,686,000	222,552,000	7.66 to 11.34
1898 (estimated)	2,186,000	288,552,000	....
1899 (estimated)	1,936,000	255,552,000	....

* These (Havre) prices were reduced from francs per 50 kilograms to cents per pound.

The statistical situation is thus shown to be reassuring, and, considering the diminution of stocks in the consuming markets, Mr. Lacerda is convinced that a rise in price is inevitable, and that the prices of past years as quoted in Havre—100 francs per 50 kilograms (17.51 cents per pound)—will again rule.

Against Mr. Lacerda's figures, we give the following statement issued by the New York Coffee Exchange on December 1, 1897, showing that the enormous stocks, or visible supplies, on hand at that date amounted to 6,442,792 bags (850,448,544 pounds) in last December. According to a cable from New York to Santos, the visible supply on hand on December 31, 1897, was 6,357,000 bags (840,124,000 pounds).

Having shown by the absence of large stocks that there is no excess of production, Mr. Lacerda meets the argument of short speculators who compare their present period with that of 1882 to 1886, calendar years, as follows:

On December 31—	Stocks on hand.		Extreme prices per pound in Havre.
	Bags.	*Pounds.*	*Cents.*
1882	3,011,300	397,491,600	7.35 to 9.63
1883	3,847,700	507,896,400	7.09 to 8.32
1884	3,800,200	501,626,400	8.40 to 12.86
1885	3,826,500	505,098,000	7.97 to 9.28
1886	2,466,000	325,512,000	7.39 to 13.57

During that period there were wild fluctuations in prices; and in 1886, when the stock fell to 2,466,000 bags, prices began to rise and were sustained up to 1895, the epoch in which speculators began to make sales for future delivery.

The mean annual production of the world is thus stated:

Years.	Production.	
	Bags.	*Pounds:*
1852–1860	5,000,000	660,000,000
1860–1870	6,000,000	792,000,000
1870–1880	7,500,000	990,000,000
1880–1890	10,000,000	1,320,000,000
1890–1900	11,000,000	1,452,000,000

The general production for the three fiscal years 1897–98, 1898–99, and 1899–1900 is as follows:

Production of—	1897–98.		1898–99.		1899–1900.	
	Bags.	*Pounds.*	*Bags.*	*Pounds.*	*Bags.*	*Pounds.*
Rio de Janeiro	3,000,000	396,000,000	3,500,000	462,000,000	3,000,000	396,000,000
Santos	3,750,000	495,000,000	5,500,000	726,000,000	4,000,000	528,000,000
All other places	4,000,000	528,000,000	4,000,000	528,000,000	4,000,000	528,000,000
Total	10,750,000	1,419,000,000	13,000,000	1,716,000,000	11,000,000	1,452,000,000

These figures do not include the estimated exports from Victoria, Bahia, and Ceara, except in 1899, when 500,000 bags (66,000,000 pounds) were added in the calculation for Rio de Janeiro.

The following figures are the estimates of the coffee production and consumption for the calendar years 1897 and 1898:

Production of—	1897.		1898.	
	Bags.	*Pounds*	*Bags*	*Pounds.*
Rio de Janeiro	3,500,000	462,000,000	3,500,000	462,000,000
Santos	5,000,000	660,000,000	5,000,000	660,000,000
Other	4,000,000	528,000,000	4,000,000	528,000,000
Stock on hand January 1	2,186,000	288,552 000	1,686,000	222,552,000
Total	14,686,000	1,938,552,000	14,186,000	1,872,552,000
General consumption, European and American	12,000,000	1,584,000,000	....	....
Surplus	2,686,000	354,552,000	....	....

To estimate the stock of the world on January 1, 1898, at 1,686,000 bags seems erroneous. The stock at Santos alone on January 8 was 924,419 bags, in place of 131,519 bags, same date last year. The entrances or receipts on that day were 21,770 bags, and up to that date from January 1 had reached 111,694 bags, while from July 1 to that date the receipts reached 4,526,533 bags. The visible supply, according to the coffee exchange of the city of New York, Mr. St. John Walker, superintendent, was on June 30, 1897, 4,173,943 bags, and on December 31, 1897, 6,422,797 bags.

The general consumption of Europe and the United States is put at 12,000,000 bags; excess, 2,186,000 bags.

Stock on hand, 1899.

Description.	Bags.	Pounds.
Rio:		
January to June	1,500,000	198,000,000
July to December	2,000,000	264,000,000
Santos:		
January to June	1,750,000	231,000,000
July to December	2,500,000	330,000,000
Other sources	4,000,000	528,000,000
Stock, January 1, 1899	2,186,000	288,552,000
Total	13,936,000	1,839,552,000
General consumption, Europe and the United States	12,000,000	1,584,000,000
Excess	1,936,000	255,552,000

COST OF PRODUCTION, PROFITS, ETC.

The Minister of Finance goes to considerable trouble to show that coffee raising is not lucrative. I quote the following paragraphs from his report:*

The planters in the State of Minas, where the mean production is calculated at 30 arrobas (the arroba is 32.38 pounds) per 1,000 trees, to place in the market an arroba of coffee, type No. 7, spend approximately, including harvesting, care of trees, wages in preparing land, during the year, calculating that 100 liters of coffee in berry produce an arroba of prepared coffee:

For—	Amount	
	Reis.	
Harvesting, care of trees, wages, etc	5,000	$1.00
Drying and "beneficing"	900	.18
Carting to station	500	.10
Freight	1,900	.38
Carting from station	200	.04
Commission on sale, 3 per cent	390	.08
Impost	436	.09
Total cost to planter	9,326	1.87
Return (sales of coffee)	13,000	2.60
Net profits	3,674	.73

In harvesting, for example, 5,000 arrobas (161,900 pounds) annually, the profit would be 17,820 milreis ($3,564).

A plantation yielding this quantity of coffee costs 100,000 milreis ($20,000), interest on this investment, at 8 per cent, 8,000 milreis ($1,600); amortization in twenty-five years, 4,000 milreis ($800); leaving the insignificant sum of 5,870 milreis ($1,174)—wear and tear of property not counted.

In the larger part of the State of Rio de Janeiro the mean production is less than 30 arrobas (971.4 pounds) per 1,000 trees, but the distance to market is less. In Espirito Santo and the south and west of Minas, in the zones that possess new coffee plantations, the mean production is 60 arrobas (1,942.8 pounds) per 1,000 trees. In São Paulo, according to belt, it is from 30 to 200 arrobas (971.4 to 6,476 pounds);

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*Consul Hill states that the report of the Minister of Finance was made when the milreis was quoted in exchange at 20 cents; the reductions are made on this basis.

100 arrobas (3,238 pounds) can be taken as an average. The profits of this increase in production are, however, absorbed in the higher wages paid to labor. The States of the south do not produce coffees, but buy at Rio and Santos for home consumption. The States of the north produce little—not enough to satisfy home demands—except Bahia and Ceara, which already export a mean annual of 600,000 bags (79,200,000 pounds). The production of these two States can be calculated at 50 arrobas (1,619 pounds) per 1,000 trees, and the expenses are low, as labor is cheaper than in other producing States.

Since the quality of coffee may be inferior to type No. 7, as it generally has been since the manumission of the slaves in 1888, the price realized will be less and the planters' profits almost nil. Therefore, the sale of this article even at 13,275 reis ($2.66) per arroba, or 8.2 cents per pound, does not compensate the planter or yield a return on his capital.

The following statement by Mr. Lacerda shows cost of production, etc., of a plantation which will produce 150,000 kilograms (330,690 pounds) of coffee.

Description.	Cost.	
	Milreis.	
150,000 trees, at 4 milreis per tree	600,000	$84,000
50 houses for colonists, at 1,500 milreis per house	75,000	10,500
Machinery, "terreiros," etc	125,000	17,500
400 alqueires* of land, at 500 milreis per alqueire	200,000	28,000
Total	1,000,000	140,000

* According to Consul Hill, 400 alqueires are equal to 348.48 ares, or 88 acres.

In addition to the foregoing, the cost of superintendence must be considered, the cost of harvesting, the "beneficing" or preparation for market, the transportation to Santos, commissions on the sale, etc., viz:

Description.	Cost.	
	Milreis.	
Treatment of coffee trees, 100 milreis per 1,000	15,000	$2,100
Harvesting 10,000 arrobas (323,800 pounds) of coffee	15,000	2,100
Carting, sacking, "beneficing," etc	10,000	1,400
Expense of management and general expenses	20,000	2,800
Cartage to railway station and freight to Santos at 8 milreis ($1.12) per bag	20,000	2,800
Commission to agent (3 per cent) and cartage at Santos	10,000	1,400
Total	90,000	12,600

I am informed that these figures, in every item, are twice too much, except the land and Santos freight; the last at 5 milreis (70 cents) would be a good average. The 10,000 arrobas (323,800 pounds) of coffee, when sacked, amount to 2,500 bags, which, at present prices, would bring 54 milreis ($7.66) per bag, or a total of $19,150. The investment was $140,000 and expense account

$12,600; a total investment of $152,600; relation of profit to same, some 13 per cent. The writer goes on, however, to figure matters after the following fashion: He adds the price of sacking, the export tax of 11 per cent on the value of the coffee, expense of putting aboard ship, export commission, steamer freight and maritime insurance, and, in Europe, landing and storage charges, insurance, banking commission, commission on sales, cartage, discounts, tare, etc., and makes the total of these expenses foot up to 23 per cent on the total value of the merchandise. He fixes the price of sale at 100 francs ($19.30) for 50 kilograms (110.20 pounds). Deducting the cost of production, which amounts to 36 milreis per bag ($5.04 per 132 pounds), leaves for the producer as remuneration for his labor and interest on his capital 28,680 reis ($4.02) per bag of coffee. The product of 2,500 bags would thus amount to 71,700 milreis ($10,038), or 7 per cent on capital invested. As a matter of fact, however, this is not the manner in which the business here is actually carried on. When the planter sells through the commissario (his agent at the place of exportation), his interest in the coffee ceases. All expenses of the two classes last considered, such as export tax, etc., at Santos, freight by steamer, and all expenses on the other side, or at New York, are borne by the exporter or his consignee, on whatever basis they have agreed to do business.

The following estimate, made by a gentleman here personally known to me, is far more trustworthy and may be relied upon. The difficulty, he says, of giving precise data will become apparent when the question of site, size, number of trees, and kind of same planted, new and old, is considered, as well as the facts that the gold coffee prices during the last two years declined more than 50 per cent, and that all local values rest on a widely fluctuating exchange basis, Brazilian currency suffering at present a depreciation of 80 per cent. As a model for a farm, I should think that 2 milreis (28 cents) per tree in full bearing would be a moderate price at present for favorable locations, dwelling houses, machinery, and other requisites included in this figure. The expense of running a plantation of 150,000 trees is probably not above $5,000 per year, not including freight to port, which is high, cost of bags, and expenses for selling. The amount of the product would equal 65,000 to 70,000 kilograms (143,299 to 154,322 pounds), yielding in Santos about 50,000 milreis ($7,000) on a total outlay of $50,000, or 14 per cent on investment.

The price for coffee of 9 milreis ($1.26) for 10 kilograms (22.046 pounds), often named as present figures in this report, is for "superior;" "bom," good, about No. 7 grade New York Coffee Exchange, sells at 7½ milreis ($1.05) per 10 kilograms, or 45 milreis ($6.30) per bag of 60 kilograms (132 pounds).

EXPORT DUTY ON COFFEE.

Prior to 1862, coffee entered the United States duty free, but the "war" exigency made a duty on coffee necessary, and this continued up to 1873, since which date coffee has not been taxed on entry at United States ports. In 1867, during the costly Paraguayan war, the Empire placed an export tax of 9 per cent on custom-house valuation of coffee, and the province where the article was produced collected a further tax of from 4 to 7 per cent, the rate not being uniform among the States. In 1871, our duty was reduced from 5 to 3 cents per pound, but in 1873 it was taken off entirely. Later on, in 1882, the Imperial Government collected 7 per cent; the States of Rio and Santos 4 per cent, and the States of Bahia and Ceara 7 per cent additional. Now an export tax of 11 per cent is collected by the exporting State, to be turned into its own exchequer, if the coffee is of its own production; otherwise, to be accounted for to the State of its origin. The custom-house, therefore, keeps separate accounts; for instance, in Santos, of São Paulo coffee and that of the State of Minas Geraes. Complaints made ten years ago by our officers as to inability to locate origin of coffee are no longer valid.

The constitution of the Republic of the United States of Brazil provides in article 9 of section 1—

> It belongs exclusively to the States to place imposts (1) on the exportation of merchandise of its own production; (2) on real estate, urban and country; (3) on transfers of property; (4) on trades and professions. The products of other States shall be exempt from duty in the State whence they are exported.

The municipalities also tax coffee at so much an arroba (32.38 pounds), the amount of which is not uniform.

THE WORLD'S CONSUMPTION OF COFFEE.

The prediction is made that during the next five years the mean annual production of all countries will amount to 12,000,000 bags (1,584,000,000 pounds), of which Brazil will furnish 8,000,000 bags (1,056,000,000 pounds).

So much for the production of coffee. Let us now turn to the disposition made of it in the consuming nations of Europe and the United States. Previous reports are prolific of figures showing the destination of coffees shipped from Brazil. New York, Hamburg, Amsterdam, Rotterdam, and London, to a certain extent, are the leading ports to which coffee is shipped. Roughly, one-fourth of the Santos crop is exported to New York, and an even larger proportion of the Rio de Janeiro crop goes to the United States; for, while Santos exports much more coffee, Rio de Janeiro is yet the main source of supply for the United States. All the large coffee houses are, of course, represented in both places.

From 1852 to 1862, the United States consumption maintained a mean of 1,500,000 bags (198,000,000 pounds) per year. It underwent considerable reduction from 1862 to 1865, notwithstanding the fact that it was freely supplied to the Army. The imposition of the duty probably restricted its consumption. The figures from 1862 to 1866 were:

Year.	Quantity.	
	Bags.	*Pounds.*
1862	834,370	110,136,840
1863	565,445	74,638,740
1864	966,488	127,576,416
1865	637,419	84,139,308
1866	1,328,988	175,426,416

During the period of inflation succeeding the cessation of the war, the consumption of coffee was greatly increased, reaching in 1885-86 about 4,000,000 bags (528,000,000 pounds). In 1889 the falling off of the stock, due to increase of consumption and scarcity of product, caused the figures to decline to 3,096,200 bags (411,698,400 pounds), remaining at 3,600,000 bags (475,200,000 pounds) up to 1889. There was a rise again in the amount consumed in 1890 to 4,075,700 bags (537,992,400 pounds), and since then there has been a steadily increasing demand for coffee, reaching a mean annual average of 4,500,000 bags (594,000,000 pounds). This makes us by far the largest consumer of coffee in the world, and the bulk of our supply is drawn from American sources. This last is a consideration of no slight moment, since the prosperity of these States, to which we look as a field of the most promise for the exploitation of our surplus manufactures, is intimately interwoven with the continued prosperity of the coffee industry.

In European countries coffee consumption has had a normal development, keeping pace with the production. The heavy duties that are levied upon coffee in France, Italy, Austria, and Germany give rise to adulteration (see article on chicory in CONSULAR REPORTS No. 176, p. 139). Mr. Lacerda calculates that a cup of coffee requires 25 grams of roasted coffee; taking a cup of coffee daily, each individual would consume during three hundred and sixty-five days of the year 20 pounds of roasted coffee; to this should be added 10 per cent, which answers to the loss of weight suffered in roasting, raising the consumption to 22 pounds annually per capita—that is, those who drink a cup of coffee daily.

Counting the population of England, France, Germany, Austria, Italy, Holland, Belgium, Switzerland, Norway and Sweden, and the United States at 300,000,000, it is seen that if only one-fourth of these people drink coffee, taken at the rate of one cup per day, it would amount to 1,500,000,000 pounds per annum, while, as before stated, the total consumption in 1897 was estimated at only 1,584,000,000 pounds. This leaves out the consumption of other countries and the considerable home consumption of Brazil.

While the increase in production has been stupendous, the increase in consumption has been quite as remarkable. The mean annual consumption for the three decades ended with 1890 was: 1870, 6,000,000, bags (792,000,000 pounds); 1880, 10,000,000 bags (1,320,000,000 pounds); 1890, and up to 1897, 11,000,000 bags (1,452,000,000 pounds). As long ago as 1893 the American Grocer estimated that the world required an annual supply of 11,050,000 to 11,220,000 bags (1,458,600,000 to 1,481,040,000 pounds), and these figures were further stated to be the minimum requirements. In the quarter of a century from 1870 to 1895 the demands of the consuming markets had doubled.

The consumption would seem to be keeping pace with production, and attention is called to the fact that during the first six months of 1897 the consumption reached 6,113,283 bags (806,953,356 pounds). This bears out the statement of the Minister of Finance in his last report that the amount of coffee required by the world was about 12,500,000 bags (1,650,000,000 pounds).

HISTORY OF BRAZILIAN COFFEE EXPORTS.

The exportation of coffee here has passed through four phases: (1) The exportations of the first crops of Brazilian coffee were made by merchants established in Rio de Janerio, who consigned the merchandise to the consuming markets to be sold for their account and risk; (2) the increase in the production and consumption gave rise to the custom of European houses sending orders, without limit of price or time of shipping, for the buying and shipping of coffee, scarcely limiting the size of the cargo, which was 5,000 bags (660,000 pounds), paying a commission of 5 per cent on the invoice; (3) Brazilian and European merchants began to operate on joint account, dividing the risks and profits of the business and even admitting at other times various persons into the business, the Brazilian houses sending coffee to cover the remittances which they had to make to pay for imports, giving the European houses a share in the cargo; (4) the establishment of lines of steamers modified the system up to then in vogue, facilitating the more rapid transportation of merchandise and affording by this means the possibility of extending the business by a larger number of intermediaries. Houses were established in Brazil for the exclusive business of the exportation of coffee, followed, through the concurrence of these houses, by the establishment of telegraphic service, by the system of sales, cost, and freight, the quantity, price, and time of shipment being fixed. This system worked well during many years, giving good results to the intermediaries, because prices corresponded to the demands of consumption, and fluctuations depended on the larger or smaller production.

Another element entered later, in the shape of "future sales." The speculation in "futures" soon assumed large proportions, increasing the risks of the business, which had hitherto been inconsiderable, and giving rise to the necessity of forming "stocks." Speculation developed to such an extent that more coffee has been sold in one month than was produced in a year. From this, legitimate business suffered, the price of actual coffee remaining stable. This speculative mania was greatly encouraged by the instability of exchange rates. This instability of exchange makes operations, cost, and freight completely uncertain.

COFFEE SPECULATION AND TRADE.

The present manner of doing business, and the alleged evils identified with it, are considered to be due to the action of the group of the branches of North American houses doing business here. Just what line of demarcation Mr. Lacerda draws among houses here is hard to tell. The largest shippers to the United States and the largest in the entire Santos market are the English house of Naumana, Gepp & Co., and the German house of Goetz, Hayn & Co. The great coffee-roasting house of Arbuckle, which cuts such a figure in our domestic coffee business, does not do a large business here as an exporter under its own name, nor does W. F. McLaughlin & Co., nor J. W. Doane & Co., among the best known and most reliable people in the coffee business. I now quote Mr. Lacerda textually:

> These large and important commercial and industrial houses work in coffee with an especial organization. In the United States they are proprietors of great coffee-roasting plants and sell the roasted article at retail, through innumerable agents, directly to the consumer. As is known, the consumer buys almost always at a fixed price and knows nothing whatever of the small and large fluctuations in the producing markets. The profits, therefore, of these American houses lie in the reduction of the cost of coffee in the producing markets, it being for them a matter of prime interest to keep down prices. They have no business interest in the rise of prices in producing markets or the markets of Europe and the United States. They seek only to depress quotations, because in the amount of the decline lies the question of larger or smaller profit. These American houses in Brazil do not limit their operations merely to the coast cities of Rio, Santos, and Victoria, but they scatter agents in every part of the interior of the States of Espirito Santo, Rio, Minas, and São Paulo. These agents busy themselves in the interior in find-

ing and ferreting out the necessities of the planters, who fall into their hands, buying their coffee at prices truly ridiculous. Brazil finds herself besieged by these houses whose first interest is to buy cheaply and to bring about, by every means, low prices for coffee, since the consumers, their clients, are accustomed to pay a fixed price. One can not imagine a situation more unfortunate than that in which we find ourselves. We have been forced to deliver our merchandise at prices which are imposed upon us by these houses, which grow great by reason of the huge profits which the present system of doing coffee business has afforded them. Again, the American houses are so organized as to enable them to name prices to producing markets, since they have no intermediaries and their aim is to buy directly of the producer and sell directly to the consumer. To the producer they strive to pay the lowest price possible, and to the consumer they sell at a fixed figure, preparing qualities of coffee that leave them the largest advantage. Besides the direct pressure exerted by them in producing markets, the American houses manipulate the market in "options," selling coffee in deposit or warehouse. It is incredible what influence these houses exert, taking advantage, day by day, of the last unfavorable incident to depress prices. We recall, for example, the quotations that they pay in the producing markets, and the quotations of the option in New York—the differences are enormous, always exceeding 10 per cent between the price of the cash article and the option—there existing a still greater difference between the prices of cash coffee (café disponivel) in New York and those in Brazil. The fact that the quotations in New York are lower than the quotations in the producing markets is explained by the necessity which the American houses have of making an impression on the course of the market, in order to work freely buying at the price that best suits them. We give the quotations of July 9 (1897) in New York. The option No. 7 was quoted at 6.55 cents and cash coffee at 7.25 cents, while at Rio on the same day prices superior to 7.25 cents were paid.

There has broken out a commercial war in the United States between an important American coffee-roasting house and the great refiners of sugar. This war was brought on by the coffee-roasting house establishing a refinery to sell sugar in packages with their roasted coffee. This new enterprise brought them into competition with the powerful refiners of sugar, who intimated to the coffee-roasting house that they must quit the business of refining sugar, else the refiners would declare a war of retaliation by competing in the sale of roasted coffee. The coffee house accepted the gage thus thrown down and continued refining sugar. The refiners then bought much stock in a large association for roasting coffee and began to reduce the prices of roasted coffee, which compelled the coffee-roasting house to bring the matter before the courts, it having a majority of stock in the association. The judgment of the court was that the coffee-roasting association, far from losing money, returned dividends of more than 50 per cent.

The inquiry revealed the fact that among the various American houses there does not exist a signed agreement to fix prices for consumption; nevertheless, it is tacitly understood that all shall operate on the same basis, adopting the same quotation for sales to consumers and leaving each one free to bring about depression of prices in the producing markets. * * * We do not deny the right of the important American houses to seek large profits; still, they ought to remember that we, too, need a little air to breathe. It has been demonstrated that the organization of the large American houses has for its object the exertion of pressure on our markets, since there is no commercial interest to them in the rise of prices of coffee. The American markets being our great consumers, we must put up barriers against these intermediaries, who, in their struggles for large profits, risk opening for us the gates of misery, they reaping the profits exclusively, since the consumer paying a fixed price is not a gainer.

Mr. Lacerda finds in the houses which buy coffee for future delivery another evil. This system (de vendos a entrigar) in Santos, as a means of obtaining resources on the part of commissarios and fazendeiros (coffee planters' agents and coffee planters), was established in 1895. In Rio de Janeiro the system has been followed for many years by the ensaccadores (sackers)—no such class exists in Santos—who sell for future delivery, following the prices of the market and receiving no advance from the exporter. In Santos, during the last three years, the business of making sales for future delivery has attained a great development, and the conditions on which these operations are conducted are every day more onerous for the seller. In the year 1895 and beginning of 1896, the prices were established by quotations, in warehouse, of the month in which the coffee was to be delivered, and the exporting house received a margin of profit of 20 to 25 per cent for these operations. Afterwards a great fall took place and warehousing ceased; the exporters then established a margin of from 2 to 3 milreis (28 to 42 cents) per 10 kilograms (22 pounds) as the difference in price between the quotation of the day and that of the day of delivery in future months by "commissarios" and "fazendeiros." This system completely falsified the base of prices and made difficult the business of the commissarios, who do not effect sales for future delivery, since these people had to subject themselves to the prices which the exporters desired to pay at the moment, the preference being once given to the sellers for future delivery, on account of the large margin of certain profits which these operations afforded them. These operations increased rapidly in Santos, on account of the advances which the exporting houses made to the commissarios and fazendeiros who made sales for future delivery. All those who yield to this business know that they are being exploited; nevertheless, in order to obtain funds promptly, they are obliged to realize these sales. The exporting houses also make some advances to the commissarios, who obligate themselves to sell them coffee at the price which they establish on the occasion of the delivery, according to the market quotation. This sort of business is also onerous, because the exporters are exigent in their classification of grades, up to the point of absolutely destroying the ruling quotation. The exporting houses buying, with a large margin, coffee for future delivery, are able to offer consuming markets low prices. In consuming markets this fact creates a bad impression, and appears to prove that Brazilians judge it advantageous to sell for future delivery at low prices. These houses also have agents in the interior of the States to buy directly of the fazendeiros; cash payment and immediate delivery. The quotations which they pay are incredible, often being the same for 15 kilograms as those which prevail at Rio de Janeiro and Santos for 10 kilograms. The more conscientious make advances to the planter, charging interest at 2 per cent per month and reserving 1½ or 2 milreis (21 or 28 cents) for 10 kilograms (22 pounds) as a commission on the advance. It is easily seen how this state of things facilitates speculation and forces prices down.

The regular business, cost and freight, has disappeared entirely, because it is impossible to maintain a margin to cover differences in exchange or fluctuations in producing and consuming markets. Prices fluctuate so violently that no one is able to forecast the oscillations of exchange or the quotations of coffee in consuming markets for one day ahead. Meanwhile business, on conditions of cost and freight, buying coffee, arranging exchange, and shipments, requires some time.

Mr. Lacerda thinks that he has made it clear that Brazilian agriculturists are without any defense, and that their product is sacrificed and sold at prices every day falling, and that this is due to the lack of a commercial organization which will impede speculation by present intermediaries.

In January, 1895, the quotations for coffee in Havre were: Java, $22.20, and Santos, $18.34 per 50 kilograms (110.46 pounds), while in June, 1897, they were quoted at $21.16 and $8.30 for Java and Santos, respectively. The reason of these large differences in prices at Havre for qualities which are bought at the same prices, says Mr. Lacerda, "lies in our exposed condition and the necessity we are under to sell at any price offered." He states that while the method of doing business in the United States has made our houses "bears" and large purchasers of low grades, so as to make greater their profits sold to the consumer at a fixed price, the method of doing the same business in Europe has made European houses "bulls." The profits in Europe are made by selling at a price superior to the cost, and for this a rise in the market is necessary, that purchases be so effected as to leave room for a commission. In this struggle the Americans have gained. The Europeans held out until Brazilian coffee reached 55 francs ($10.62) in Havre, when they liquidated at large losses.

The causes assigned for the low prices of Brazilian coffee are: (1) The monopoly of the coffee business of the United States by the roasters of coffee; (2) the lack of commercial organization in Brazil to control the exportation of coffee, as in Holland, where the Government steps in and regulates sales and method of doing business, according to the necessities of consumption, by the institution of monthly auctions; (3) the lack of a proper credit system in Brazil, which should be remedied, as proposed by the Finance Minister, by the creation of a great mortgage bank with branches in all parts of the interior adjacent to plantations; (4) the prevalence of the false theory of an excess in the world's production; (5) excessive speculation in options; (6) absence of statistical information as to the true situation of coffee and the progress of production and consumption.

COFFEE VERSUS OTHER BRAZILIAN EXPORTS.

The question of coffee in Brazil is of importance, not only to Brazil, but to the world, since Brazilian production plays such a great part in the world's supply as to seem to justify my extended reference to the Brazilian contention here as to causes of the fall in prices, the equilibrium in finances depending upon the fate of coffee. The relation that coffee bears to other exports may be seen from the total value of exports from Brazil in 1895:

Coffee	$140, 000, 000
Indian rubber	25, 000, 000
Other products	15, 000, 000
Total	180, 000, 000

How the fall in prices and exchange has been felt is seen in the following statement, which gives the exports of coffee for four years and the prices thereof in sterling money:

Year.	Bags.	Price per bag.	Total value.		Total pounds.	Per pound.
						Cents.
1894–95	7,000,000	£4.00	£28,000,000	$136,262,000	904,000,000	15.03
1895–96	6,000,000	4.00	24,000,000	116,796,000	792,000,000	14.65
1896–97	8,500,000	2.10	21,250,000	103,413,125	1,122,000,000	9.21
1897–98	7,250,000	1.15	12,687,000	61,735,286	957,000,000	6.45

The fall in the year 1896–97 caused a loss to the planters of $76,136,250, and, as everybody has gone into coffee raising—even the common necessities of life are imported, vegetables, meats, and fruit from the River Plate, onions from Portugal, potatoes from France, wheat from the United States, as well as hog products—this falling away of the purchasing power has stirred all Brazil to its foundations. The figures for the last year are too small; but the huge crop, amounting to 10,000,000 bags (1,320,000,000 pounds), at 55 milreis ($7.70), present price, yields only $77,000,000, while the small crop of 7,000,000 bags in 1894–95, which brought $20 per bag, amounted to $140,000,000. All this while imports are increasing rapidly, as a reference to the amount and character of goods carried in the last ten years by the São Paulo Railway, the great primary feeder of the States, shows. Matters are made worse by the fact that the 1,000,000 immigrants from southern Europe (Italy, Portugal, and Spain), who have come in during the decade, send out of the country annually, it is calculated, $10,000,000.

FRANK D. HILL,
Consul.

SANTOS, *January 11, 1898.*

SUPPLEMENTARY REPORT ON COFFEE.

PRODUCTION IN VENEZUELA.

The Government of Venezuela has just published in a "yellow book" a collection of data referring to the coffee and cocoa industry of the Republic. This document is in the form of a series of questions and answers, and is addressed to the Minister of Spain at Caracas. It appears that the Spanish Government instructed their minister to obtain this information, and that he put it in the form of questions, to which answers are given, the result of investigations by the Venezuelan Minister of Foreign Affairs, from which the following is extracted:

> The area under coffee cultivation is about 163,508 hectares (403,865 acres), and it is extending. The total acreage is planted and producing coffee, save the trees planted during the last two years.
>
> The total production of coffee in Venezuela is 3,000,000 quintals (304,800,000 pounds), of which 2,000,000 quintals are consumed in the country and 1,000,000 quintals exported.
>
> It is impossible to estimate the production even approximately, when the new plantations come into bearing.
>
> The average age of the plantations now in bearing is thirty years. The average duration of the productive coffee tree is thirty years in the hot lands and about sixty years in the temperate zone.
>
> The average yield is 3½ pounds per tree. The harvest is gathered either by selecting the ripe berries or gathering all at once from every tree.
>
> Coffee is cultivated on the highlands near Caracas and in the valleys of the Luy and Aragua.
>
> The average price of coffee at present is about 80 bolivars ($15.44) per quintal.
>
> In addition to coffee, the following products are cultivated in Venezuela: Indigo, sugar cane, maize, cereals, small fruits, to which may be added cotton for home consumption.
>
> Laborers for coffee plantations are chiefly obtained from neighboring towns, and are paid an average wage of 3½ bolivars (58 cents) per day. Their food is abundant, and consists of meats, corn bread, beans, and vegetables. The cost of a laborer's food is estimated at 100 bolivianos ($19.30) per month.

I may add on my own account, from what information I gathered in Venezuela last year, that the area of coffee lands is being extended, and is capable of great extension. It should be noted, however, that the bolivar, nominally valued at 19.3 cents in United States gold, is greatly depreciated, and, as Venezuelan bonds in London have just fallen from 44 to 30, a further depreciation is probable. There, as here, too, all expenses to the planter are paid in paper money, while the product is sold at a gold price; this, of itself, furnishing a great fillip—a considerable stimulus to the industry.

PRODUCTION IN NICARAGUA.

Minister Baker (United States CONSULAR REPORTS No. 199) says:

The harvesting of the coffee crop of Nicaragua for 1896–97 has now been almost completed, and a small portion of it has gone forward to market in New York and Europe. Owing to the lack of rainfall in a portion of the coffee-growing section of the country—that portion nearest the Pacific Ocean—during the last three years, the crop is not a full one. The quality has also suffered in a slight degree. The planting of young trees has gone right along from year to year; so that with a good season and a full crop Nicaragua would have produced this year, it is estimated by good judges, fully 50,000 bags, or 5,000,000 pounds, more than at any time heretofore. The Matagalpa region, in which is located the American colony, is in the interior of the country, and it has been benefitted by the rains which come up to it from the Caribbean Sea. Consequently, the crop of that region is double that of last year. This year the export from that region will reach 1,000,000 pounds, against 500,000 pounds in 1895–96. As going to illustrate the growth of this industry in that section, I note that when I came here four years ago there were but 28 Americans—men, women, and children; there are now in the colony 98 Americans. At that time (1893) the number of coffee trees, but few yet in bearing, was reported to be less than 50,000; at this time the number exceeds 7,000,000. With a good season, it is estimated that the crop next year will, owing to the young trees coming into bearing, reach the amount of 4,000,000 pounds. The American capital represented about Matagalpa in 1893 did not exceed $50,000 (United States currency); at the present time, the investments in coffee culture of American companies aggregate $405,000 and individual investments $155,000, making a total of $560,000 within four years. The quality of Matagalpa coffee is equal to the best Costa Rica and Guatemala article, which in the markets of the world, is "equaled by few and excelled by none."

PRODUCTION IN PARAGUAY.

Paraguay has a soil and climate adapted for coffee culture; indeed, it is naturally a part of the Brazilian coffee belt. On account of lack of immigration and the indisposition of the lethargic Paraguayan peon to labor longer than on Monday or Tuesday to supply his simple wants for the remainder of the week, it will be some time before much is done in this or any other branch of agriculture. I have seen coffee of a beautiful berry raised near Asuncion years ago. Of course, the native Paraguayan drinks, and will continue to drink, yerba-maté, as do also a population estimated by Mulhall at 18,000,000, in the River Plate countries, Bolivia, and South Brazil.

PRODUCTION IN PERU.

The British vice-consul (Mr. Blacher) writes from Peru:

The production of coffee is increasing and bids fair to become one of Peru's staple articles. The great coffee-producing district is composed of the Chanchamayo, Perené, Pancarbambo, and Rio Colorado valleys, which are all connected by paths with the village of La Merced, the most eastern spot inhabited in that part of Peru. The fall in the value of this product in 1896 naturally caused some misgivings among producers; however, this alarm does not appear to rest on a well-founded basis, for the coffee they produce being of an excellent quality, a rise may take place at any time. The chief difficulties are means of transport and labor, both of which are undoubtedly serious drawbacks.

PAST AND PRESENT PRICES.

Messrs. W. H. Crossman & Bros., in a circular issued in September, 1897, estimated the present crop at 4,500,000 bags for Santos, and 3,500,000 to 4,000,000 for Rio de Janeiro, and commented on prices, past and present, and production as follows:

> As regards the outlook for the growing crop, there is no doubt that the immense number of new trees commencing fruit bearing for the first time will swell the possibility of a larger production. Everything so far points to the largest crop ever raised, but it is entirely too early to reach any conclusion. We may, however, be sure that conditions thus far are favorable, for if anything to the contrary were passing, it would be reported and exaggerated at once. Therefore, we again warn the trade not to place reliance on any reports emanating from those sources which during the past year and a half sent out, on at least fifty different occasions, incorrect and, we may add, false information. In many quarters it has been currently reported that present prices are the lowest ever known, and that there is a probability of a quick turn the other way. In correction of this statement, we beg to say that everybody familiar with the trade ought to know that lower prices than the present ruled in 1882, when New York options sold below 5½ cents and Havre below 40 francs, and the quality of good average in Havre was then fully 14 per cent better than now. These prices lasted for about three and one-half years, being interrupted for a short time by a Brazilian syndicate, which in the end failed disastrously, notwithstanding the 1883-84 crop (in which it attempted to control the markets) was a small one—only 5,050,000 bags. We mention this fact, as even a small crop did not help values, although backed by a heavy syndicate in Brazil, when actual stocks were not nearly as large as they are now. The talk now current about putting up prices quickly, in the face of supplies that were never heard or dreamed of, is therefore somewhat too hopeful. Nor has the present prosperity anything to do with the value of coffee. On the contrary, a part of our prosperity is based upon the low value of coffee, considering the fact that we are saving on the present prices we are paying in Brazil about $50,000,000 per year, as compared with the average prices ruling from the 1st of July, 1886, to the 1st of July, 1896—a larger amount than is realized from the higher prices received for the wheat exported from this country. That coffee is entirely dependent upon itself can be best illustrated by the fact that during the extremely bad years from 1873 to 1878 coffee ranged higher in price than ever before, while from 1879 to 1883, years of great prosperity, coffee declined and reached the lowest point, even lower than to-day. The panic of 1893 could not disturb values of coffee—an article relying upon consumption and production—and as values remained high for so many years during depression in other products, it forms the very reason why the production of coffee has not only increased in Brazil, but in every country in the world where it could be raised. The high prices of former years are alone responsible for the current low prices, and as, on an average, nature establishes a recompense in all things, we expect to see coffee as much lower next year as it has been high in the past. Nor will

these prices reign in consequence of speculation; they will be governed entirely by the weight of the merchandise, and the invariable experience of the past has been that an article falling of its own weight can not be rescued until the weight is relieved.

The production of other grades of coffee than Rio and Santos is progressing favorably. Some European statisticians have amused themselves for several years by trying to make the crops other than Rio and Santos appear to be 4,750,000 to 5,000,000 bags. The majority of their figures have been out of proportion, so that their estimates fell short of the mark 1,000,000 to 2,000,000 bags. As regards Victoria and Bahia, we are informed that Bahia will produce less and Victoria more than last year, and that the two together will yield about the same quantity—say 650,000 to 700,000 bags.

In regard to other mild-coffee countries, we have no doubt that, owing to the disappointing returns they have been receiving for coffee, much of the last crop has been held back. As the production in all the coffee countries where the higher grades are raised is extremely profitable, the total quantity is likely to increase from year to year, and 5,500,000 bags to 6,000,000 bags outside of Rio and Santos would be about the figure we could to-day place upon it. The total production of the world will, in our opinion, be about the same as during the 1896–97 crop—that is, a total of 14,000,000 bags, divided by about 8,500,000 for Rio and Santos and 5,500,000 for all other countries, with the possibility that ours may be more and the others less; but we think that the total will not be far from the figure we mention.

The same house, in its circular last to hand (New York, December 24, 1897), says:

From 1884 to 1886 the price paid to the planter, in Brazilian currency, averaged about 23 milreis ($12.56) per bag. The planter now gets in excess of 48 milreis ($6.72) per bag, and it will require some time before production at this rate becomes unprofitable. The milreis, at the exchange rate to-day of 7d. (14 cents), serves just the same purpose to the Brazilian planter as it did at 27d. (54.6 cents) exchange for the payment of interest on mortgages, debts contracted in Brazil, etc. The railroad freight for coffee to the seaports, while much higher than before, is still payable in milreis and has not advanced in proportion to the low exchange. The cost of labor, which, relatively, should have quadrupled with the depreciation in the currency-exchange rates, has only doubled, and it requires a lower price in milreis before planters will stop harvesting what is grown.

We are informed that the average cost of production in Rio is about 9 milreis ($1.26) per arroba, which is 37 milreis ($5.18) per bag of 60 kilograms (132 pounds). The average price for coffee which in quality is better than Rio No. 7 is to-day over 50 milreis ($7) per bag; and it is generally admitted that in Santos the cost of production is on a lower scale than in Rio. So long as this condition of affairs exists, and so long as the consuming markets are more desirous of protecting the property already in hand than of trying to buy cheaper and thus coming to a safer basis, just so long will this encourage large crops, with the result that the surplus will be finally transferred from producing to consuming markets. This means that the weight of supplies will be felt most by those who are already heavy losers during the past two years, leaving them less able to cope with the tremendous stocks the more they persist in their present policy.

Apart from Rio and Santos, production of coffee in other parts of the world continues to increase, but not so rapidly. Victoria and Bahia are probably producing treble the quantity they did six years ago. The production in mild-coffee countries is increasing slowly but surely. We figure that the arrivals of mild coffees from

July 1 to December 1, 1897, in the world, exclusive of Rio and Santos kinds, are 1,387,979 bags, compared with 1,269,796 bags for the same period in 1896.

Reports sent to us from Venezuela are favorable for a larger crop than last year. Costa Rica sends the same report. Salvador will give at least 50 per cent more than last year, including what was left of the previous crop; Guatemala will give probably less. For Mexico the reports are contradictory; but the average information points to a yield about the same as last year. In Java the present crop is estimated at about 400,000 piculs (53,320,000 pounds) Government Java, against 265,000 piculs (35,324,500 pounds) last year. The detailed reports from all these countries are usually colored and unreliable until the merchandise is shipped to the seaports; but it is safe to count upon a slow yet steady increase.

The idea that the entire coffee crop will not be gathered, in consequence of the price, is one that we discredit in toto. For many years past we have pointed out the fact that coffee culture gave a profit of from 100 to 200 per cent, according to the different countries. Even if this should shrink to the actual cost, planters will be obliged to gather the crops, which provide their only revenue and means for paying for their necessities. With the exception of the high-priced plantations bought on speculation during the higher range of values, we believe that in all producing countries coffee is still being grown at a fair profit—in Brazil probably from 25 to 33 per cent—and the larger quantities they now gather compensate for the lower price at which they sell.

* * * * * * *

We are now in the midst of overproduction, and the end is not in sight, which is best demonstrated by the fact that Brazilians themselves are afraid of it and continue to misrepresent instead of admit the real facts. This sort of thing tends more to destroy than to restore confidence with those who are not biased, and why such enormous stocks and continued overproduction should have any more effect on coffee than on other staples, we leave to others to explain.

The Jornal do Commercio, of Rio de Janeiro, January 19, 1898, contends:

(1) That there is an excess of production in coffee, or, in other words, the demand of consuming countries has not kept pace with the march of production in the world.

(2) That the marked increase in production, while general, is particularly notable in Brazil.

(3) That far from a decrease being looked for here or elsewhere, new coffee trees are coming into bearing and new coffee lands are being exploited, and there are vast areas in different parts of the world adapted for growing coffee which will gradually come under cultivation.

(4) That low prices for this staple inevitably follow from this state of things, but that coffee growing is probably still a lucrative occupation in Brazil and elsewhere, even at the present prevailing low prices of the product.

(5) That, while the interested action of speculation and the efforts of representatives of foreign houses to buy as cheaply as possible naturally tend to depress prices, yet the causes of the fall in coffee lie much deeper.

(6) That to attribute the state of the industry to temporary evils that lie on the surface and are, from the nature of things, evanescent and transient in their effect, and to ignore the causes of which the present situation is the logical issue, can not in any wise help the producer or meliorate his condition.

(7) That, while some alleviation may be found in the result of the propaganda initiated to introduce Brazilian coffees to the attention of the Russians and other noncoffee-drinking peoples, and the prevalence of existing low prices may diminish the use of chicory and other noxious and deleterious adulterants, yet progress in this direction must be slow, owing to the tenacity with which peoples cling to habits already formed.

(8) That well-meant efforts to diffuse technical education, to reduce transportation charges, to aid the planter by the establishment of mortgage banks—branches to be located in his vicinage—to restrict injurious speculation as far as possible, while commendable, do not go to the root of the matter, and, as remedial measures, are likely to be found to be veritable apples of Sodom.

(9) That while Brazil has extended her agricultural area prodigiously, her energies have been too much devoted to this one article, and she has been compelled to import large quantities of other agricultural produce which soil and conditions here permit of profitable cultivation.

(10) That, to attain a harmonious economic development and become independent of foreign sources of supply for the necessaries of life, she must cease to depend so largely on coffee production and diversify her industries, fostering those to which she has natural adaptation.

(11) That, while exchange—the valuation of an inconvertible paper currency recognized only in the home country by the fiat of law or the acquiescence of custom—would be expected to rise as coffee falls, yet such has been the pressure on the market from causes outlined above that we have witnessed the curious spectacle during the last two years of both falling together.

(12) That Brazil's purchasing power has, through the fall in coffee and exchange, been cut in half; for, while the production of coffee has risen so enormously within two years, on account of the fall in prices and the deplorable decline in exchange, the net product to Brazil—estimated in international money (gold), in which by buying coffee bills from exporters she is compelled to liquidate her adverse balances for imports—is only about half for a crop of 10,000,000 bags of what it was three years ago for a crop of 7,000,000 bags.

IMPORTS AND EXPORTS.

The following table shows the imports and exports of Brazil during the year 1897, as taken from unofficial but approximately trustworthy sources:

Articles.	Value.	
Imports.	*Milreis.*	
Wood for building (pine)	10,000,000	$1,400,000
Dried and fresh meat	100,000,000	14,000,000
Corn	30,000,000	4,200,000
Hay	2,000,000	280,000
Wheat	100,000,000	14,000,000
Rice	25,000,000	3,500,000
Gas and wood coal	15,000,000	2,100,000
Kerosene	5,000,000	700,000
Wines	80,000,000	11,200,000
Fish	15,000,000	2,100,000
Oils	5,000,000	700,000
Butter, dulces, fruits, bacon, etc	20,000,000	2,800,000
Dry goods	100,000,000	14,000,000
Clothing, etc	100,000,000	14,000,000
Raw materials	25,000,000	3,500,000
Hardware, cement, rails, locomotives, etc	20,000,000	2,800,000
Government charges in Europe	220,000,000	30,800,000
Remittances of immigrants, foreigners, and private parties to Europe	100,000,000	14,000,000
Total	972,000,000	136,080,000
Exports.		
Coffee	500,000,000	70,000,000
Rubber	100,000,000	14,000,000
Other products	10,000,000	1,400,000
Total	610,000,000	85,400,000

This leaves a balance against Brazil of 362,000,000 milreis ($51,080,000) annually. The compiler of the table states that of sugar, tobacco, fruits, cacao, woods, etc., hardly anything is exported. While the figures thus given may be liable to serious corrections, I give them for what they are worth, as there is no doubt a large balance against the country.

OUTLOOK FOR BRAZIL.

It will not do, however, to be unduly pessimistic regarding the economic and financial outlook of Brazil. Her foreign debt is small, compared with that of many countries, notably the neighboring Argentine Republic. The great States of Para, Bahia, and the entire group from São Paulo south are prosperous. It is true that the Federal Government—in a decentralized country, which, under the constitution of 1891, "in order to form a more perfect union," yielded perhaps too much when the 11 per cent export tax was relegated to the individual States—finds itself confronted by serious financial difficulties. These perplexities are increased by an adverse balance against the country, the steady drain for imports, and by remittances of colonists, who have established themselves here to the number of 1,000,000 within the last ten years.

But in this steady inflow of immigration (57,000 at this port alone last year), consisting for the most part of thrifty husbandmen, whose capacity to expand to a full measure of citizenship is shown fully on the broad prairies of the great Argentine (the present generation of whose population is an intermixture of Argentine and Italian blood, inheriting the habits of southern Europe, modified by local environment), stands one of the main pillars of this nation's hope.

With a judicious pruning of public expenditures, and an adjustment of income and outgo, natural conditions will prevail.

The sale just effected for cash of three men-of-war, still in Europe, to the Japanese Government is indicative of the resolve of the administration. Fortunately, the military for the policing of a country larger than the United States consists of but 24,000 men.

All things seem to work together for good in these new, undeveloped lands situated in the Western Hemisphere, the surface of which has been merely scratched and the bulk of whose populations are yet found along the littoral or beside the lines of waterways or artificial communication with the interior, and this notwithstanding that three centuries have passed since they were disclosed to European view. Judged from day to day, they may seem to be stationary; but, comparing one decade with another, great changes are seen, all on the side of progress. Civic qualities are more and more developed. The military element is no longer all powerful and is losing caste gradually, and public opinion controls more and more. Within ten years I have seen military men give way as rulers in Paraguay, Uruguay, and Venezuela, and, although the pathway in public place may have been thorny, yet the possibility of a rule not entirely of force has been demonstrated. Foreign influence is being constantly felt, although Europeans are stern critics. The relations of Brazil with all the countries of Europe and the United States are close, her harbors being filled with the marine and merchandise of all countries.

FRANK D. HILL,
Consul.

SANTOS, *January 26, 1898.*

GARDENERS' SCHOOLS IN RUSSIA.

In compliance with a request from a resident of Massachusetts,* a Department instruction dated June 10, 1897, was sent to various consular officers in Russia, to forward information in regard to gardeners' schools in that Empire. Reports have been received from Odessa, Moscow, and Warsaw.

ODESSA.

Consul Heenan writes, on February 5, 1898:

In compliance with instructions from the Department, I have the honor to transmit a report on school gardens and agricultural science in Russia. In this report I have given a brief history of the efforts made to improve the conditions of agriculture in Russia. It seemed advisable to do this in order that the subject of school gardens should be better understood.

The system of farming in vogue among the peasantry in Russia is primitive in the extreme, the peasant believing that what was good enough for his grandfather is good enough for him. The difficulties and opposition which private and official efforts meet in Russia would scarcely be understood in the United States. It is quite safe to state that the soil which is tilled by the peasantry here, if it were tilled in a proper manner, would yield two and even three times as many bushels per acre as it does at present. How serious a competitor Russia would then be in the grain markets of the world will be easily understood, when it is remembered that its wheat crop alone, in 1896, was 372,000,000 bushels; in 1895, 397,000,000 bushels; in 1894, 446,000,000 bushels; and in 1893, 402,000,000 bushels.

The historic part of this report was taken largely from Prof. N. P. Moskalske's article on agricultural schools in Russia, which was prepared for the Columbian Exposition at Chicago in 1893. The part relating to school gardens was obtained by correspondence with various parties and by visits and conversations with others.

I have confined this report to the school gardens in the government of Ekaterinoslav, because this province is a fair example of what has been done.

The first practical school of agriculture in Russia was founded in the government of St. Petersburg late in the last century. It was the first attempt to develop the science of agriculture in Russia. Persons of both sexes and of all classes were admitted; the full course was three years. The attempt, however, was a failure and was abandoned in 1803.

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* Advance Sheets of the report have been sent to the inquirer.

In 1822 the Agricultural Society of Moscow, in connection with the Economic Society of St. Petersburg, established at Moscow an agricultural school with an adjoining farm, where, at first, only peasants belonging to landowners were admitted. Later on, in 1835, boys of all classes had free access to the school. The qualifications of entry were that all applicants should be able to read and write and should be not less than 16 years of age. The full course was for five years, and comprised the ordinary sciences, as also geodesy, chemistry, physics, mechanics, agriculture, architecture, and bookkeeping. The aim of the school was to qualify young men to manage estates.

In 1825 a similar school was founded in St. Petersburg by the Countess Strogonov, who gave it over to the Imperial Economic Society and permitted the students to make their practical studies on her estate of 1,200 acres, in the government of Novgorod, about 60 miles from St. Petersburg. Eventually the Russian Government contributed toward the support of this school; nevertheless, as it proved to be too great a financial burden for the countess, and as it did not show very practical results, it was closed in 1844. The same fate awaited the two agricultural schools founded near St. Petersburg in the forties; that of Udelnoe exclusively for peasant boys, and the St. Petersburg school, belonging to the Economic Society, exclusively for boys of the nobility. The peasant students soon left the school and returned to their old ways of farming, while the students of the other school, profiting by the rights given them by the school, entered the Government service. The committee for improving agriculture in Russia, which was founded in 1833, had great influence on the development of the science of agriculture in Russia. It was due to the influence of this organization that Government aid was secured for existing agricultural schools, and also for the establishment of new schools. In 1836 a new school was established in the town of Gorki, in the government of Mojilev, with teachers specially trained for their duties by the professor of rural economy and technology in the University of Yuriev.

The first establishment in Russia for teaching the science of gardening was founded in the Crimea in 1812 and was known as the Nikitsk Garden. The principal aim of this institution was the cultivation and acclimatization in the Crimea of the plants of southern countries. In 1828 the Magarachsk School of Viticulture was joined to the garden. Later on, two garden schools were opened, one in Penza and the other in Ekaterinoslav, and also the imperial botanical garden in St. Petersburg. Of these, the Ekaterinoslav school was closed in 1859, while the others have remained in existence ever since.

The above brief summary gives the history of private effort in Russia to spread the science of agriculture. It is only since the reign of Nicholas I, when the Ministry of Crown Domains and Agriculture was established, that systematic measures for spreading the science of agriculture have been taken by the Russian Government. An agricultural school with an extensive special course, but with very limited instruction in other branches, was opened in the town of Gorki in 1840. It was divided into three sections—a lower, designed principally for peasants; a higher, called the Gorki Agricultural Institute, for furnishing educated agriculturists; and a middle, for preparing land stewards and farm bailiffs. Twenty thousand dollars was annually appropriated for the maintenance of the institution, together with the school and farm.

Young men who had finished their literary studies in a middle school were admitted to this institution. The course was four years, during which time students were trained in natural and agricultural sciences, and were given practical lessons in farming. Those who finished the full course in the institute had the same rights as those who graduated from the universities. In 1864 this institute was transferred to St. Petersburg, and in 1869 the teaching of forestry received so much attention that the institute was divided into two sections—agriculture and forestry. In 1878 the first section was closed altogether, and the school was changed into a higher school of forestry. From the foundation of the Gorki Agricultural Institute to the year 1865, when it was transferred to St. Petersburg, 499 persons had completed the full course; if the 70 students who finished the higher section be included, the total would be 569.

The agricultural schools which were afterward established in the various governments of Russia were chiefly molded on the Gorki Institute. For the lower instruction in agriculture the Government provided eight farms on Crown lands in the different divisions of Russia. These farms were designed for preparing young peasants to be expert farmers, and for making experiments to improve the industry. Young men from 16 to 20 years of age, able to read and write, were admitted as pupils on these farms. The teaching was exclusively practical and consisted in working on the farms and in studying the best methods of agriculture. The course was for four years, and corresponded to that of the lower schools, adding thereto the fundamental rules of agriculture and of veterinary surgery by simple means. Schools of these three grades also existed in Russia for teaching gardening. In the fifteen years during which farms and nurseries existed for teaching boys, the number of pupils who had finished their full course was as follows: Up to 1865, there were on the farms 2,410 pupils, and in garden establishments, up to 1869, 849 pupils, of whom 518 were in garden schools and 331 in nurseries. These pupils, chiefly serfs, were of great use to their masters. The records show, however, that these schools made but little improvement in the peasants' method of farming, as most of the pupils on returning home continued to follow the old systems of farming. The principal reason why the teaching of these schools was not more effective was that the pupils were too little taught to study special branches; there was no elementary instruction in the natural sciences, preparatory to the study of special subjects; the boys often attended these institutions not from choice, but under compulsion, and looked upon the whole course in the light of an unpleasant duty. This view was pretty general among the peasant farmers, and even among the landowners.

This brings us down to the reign of Alexander II, and the liberation of the serfs in 1861, which freed the Crown peasants from the jurisdiction of the Ministry of Crown Domains and resulted in a complete change in the system of developing agricultural industry in Russia. The Government soon discovered that the landowners, as well as the peasants who had been set free, were in great need of instruction in farming, and steps were taken to disseminate the science of agriculture among them. Without going too much into detail, it will suffice to state that the efforts made consisted in still further developing and increasing the number of the schools. These schools were classified as "higher agricultural schools," "middle schools," "farm schools," "land-surveying schools," and "garden schools."

It is not the intention in this report to do more than mention these schools and to add that they have been very successful. It is with the lower agricultural schools and the efforts to reach the peasant class that this report has to do. When the middle agricultural schools had attained a sufficient development, the Ministry of Crown Domains began to establish lower-grade schools. These were organized one by one, and during the ten years from 1871 to 1881 six were established. The first founded was a dairy school, opened in 1871, in the town of Edimonovo, on the River Volga. The school admitted pupils of both sexes, without any restriction as to age or qualifications. The number of pupils was over 80 per year. There was no theoretical course and no fixed plan for practical studies in the school.

The second lower school was the Goretsk Trade School, founded in 1872, for preparing workmen for making farming machines and implements. A factory and workshops were annexed to the school, in which boys learned to make and mend farming implements and machinery, and for that purpose they were instructed in joinery, wood turning and polishing, locksmithing, soldering, and smithy work in general. The full course at this school was five years. Besides the ordinary subjects, the following were taught: Physics and general mechanics, metal and wood technology, agricultural mechanics, the construction of agricultural machines and implements, tracing, and geometric and technical drawing. The average number of pupils attending this school was about 50 a year, and the number who finished the full course was, on the average, 4 persons a year. The school receives $2,000 annually from the Government.

To the category of agricultural schools established according to special regulations belongs the school in Courland, on the estate known as Alt-Saten; also the schools in the governments of Minsk, Kostroma, and Vladimir. As the organization and maintenance of these lower schools were very expensive, the number of pupils finishing the full course rather small, and the demand for expert farmers considerably increased, the Ministry of Crown Domains arrived at the following conclusions: That it was very important to increase the number of lower agricultural schools; that the cheapest and simplest method would be to establish them on well-organized estates, believing that theoretical teaching could be better combined with practice on such estates than on Crown lands. The law in connection with these lower schools, which was enacted in December, 1883, contains the following provisions:

(1) The aim of the lower agricultural schools is to spread among the population the fundamental principles of farming and of the trades connected therewith, principally by practical studies and work.

(2) These schools are to be founded by private persons, by zemstvos, or by societies on lands pertaining thereto, or granted by the Government for that purpose.

(3) The courses of these schools are divided into two grades, namely, a general for the teaching of agriculture and a special for its different branches, such as apiculture, gardening, wine making, dairying, etc.

(4) All the pupils are required to work gratis on the farm belonging to the school or to the founder of it, but after one year a small salary may be given them.

(5) The lower schools may be of two categories, first and second; but the course in both is the same, and of three years. One or two preparatory classes may be annexed to the school.

(6) Boys not younger than 14 may enter the schools of either category. Those who enter the first category must previously finish the course in a two-class village school. To the preparatory classes, pupils with very limited education are admitted.

(7) Besides reviewing the general sciences, the pupils are to be taught natural sciences and given a short course in agriculture.

(8) In winter the pupils study in classes, and the summer is given to practical studies.

(9) After finishing the course, the pupils, before receiving diplomas, must practice for one year on other farms.

(10) The Government contributes from $750 to $1,800 a year to agricultural schools, according as they belong to the first or second category, and to the number of preparatory classes. This sum is given only for the maintenance of the teachers and for books.

(11) In schools supported by the Government, a smaller number of pupils are admitted. A special contract is concluded with the Department of Agriculture and Rural Industry, in which are stated the rights and obligations of the founder of the school and of the proprietor of the estate on which it is opened.

(12) Those who serve in the schools are freed from military conscription and enjoy all rights attending the civil service, and at the end of each five years' service receive from the treasury an augmentation to the amount of a fourth of their annual salary, till such time as the originally determined salary shall have been doubled.

(13) Special regulations for dairy schools have been drawn up and perfected by the Minister of Imperial Domains, in mutual agreement with the Minister of Public Instruction. In the regulations for these schools the following points are noted, in distinction to the regulations of ordinary rural industrial schools:

Dairy schools may be established on all private estates where a regular dairy industry is carried on, where there are not less than eighty milch cows, and where each cow gives not less than 2,700 pounds of milk annually. The school may be either for boys or girls. The number of pupils in each school must not exceed 12. A treasury subvention is accorded, both for the salaries of the director or directress and the teachers of the school, as well as for the maintenance of the pupils. The course of studies extends over a period of two years, followed by a supplementary term of six months to one year for practical training in other branches of rural industry.

The number of applications for permission to establish elementary schools in accordance with these requirements was so great that the ministry was not in a position to satisfy them out of the funds assigned for the purpose, notwithstanding that, including the sum of $6,000 originally set apart in 1844, these funds already amount to $47,000, independent of the subsidies granted to dairy schools. Out of this sum, up to 1894, 50 regularly founded schools have been opened. Subventions from the treasury are granted to 34 of these 50 schools, 5 of them having been founded by private contributions. The entire sum given by the Government amounts to $42,000, making an average sum of $1,235 for each school, the founders expending on their own account $63,000, and on account of the zemstvos (county councils) $16,100, for the maintenance of 8 schools and aid of some of the other 34 schools. Independently of this, out of the funds set apart for the dairy industry, $10,000 are granted to 5 dairy schools and 3 girls' schools for training in rural industry and domestic economy. Eight schools are maintained without any subvention whatever from the Government.

In 31 rural and garden industrial schools the average annual number of pupils in attendance is 41. The maintenance of these 31 schools costs the Government $33,000. The sum expended on these schools by their founders and by the local authorities amounts in all to $64,000. In general, the maintenance and instruction of each pupil in the rural industrial schools cost the Government and the founders $72.

The number of pupils received into dairy schools is purposely limited, in order to secure for them a better and fuller training, both in the care of cattle and in every branch of the dairy industry. In the five dairy schools there are not more than 55 scholars, giving the average number of 11 for each school, and, as $6,500 are assigned by the treasury to these schools, it may be reckoned that each scholar costs about $118 a year.

Besides the dairy schools already mentioned, in two of which girls are also admitted, a number of schools designed exclusively for girls have been established in different parts of Russia by the aid and with the concurrence of the Government. In these schools are received girls not younger than 16 years, and who must previously have gone through the regular course of studies at one of the national schools. They are instructed in those branches of rural and domestic industry with which women have generally to occupy themselves, namely, the management of the dairy, bird breeding, gardening, kitchen gardening, cooking, sewing, nursing, etc. The course extends over two years. Thus, under the administration and care of the Ministry of Imperial Domains, there are, in all, 68 rural industrial schools. The sums expended on their maintenance, and the number of pupils receiving instruction in these schools, are set forth in the following table:

Class of schools	Number.	Pupils.	Cost of maintenance.		
			From the Government.	From the zemstvos and founders.	Total.
Higher schools	1	111	$71,000	....	$71,000
Middle schools	8	1,186	112,500	$18,000	130,500
Lower schools:					
On a special footing	9	463	41,500	7,000	48,500
On the normal footing, at work	40	1,397	46,000	68,000	114,000
On the normal footing, at work, opened in 1893	10	....	7,500	33,000	40,500
Total	68	3,157	277,500	126,000	403,500

Besides the middle schools of rural industry just mentioned, which are under the supervision of the Ministry of Imperial Domains, there are similar schools under the administration of the Ministry of Public Instruction. These are two professional schools—one in the government of Perm and the other in the government of the Taurida (Crimea).

Much attention has lately been directed to the idea that instruction in rural industry, and particularly in the garden and kitchen industry, might with profit be given to the pupils of the national schools. With this purpose in view, special classes for training teachers for the national schools were established. This training was given during the summer in the educational establishments of the ministry, and was supplemented by regular practical training under the immediate direction of the tutors of these establishments. During recent years similar classes have been opened in many of the schools of rural and garden industry.

In all, or nearly all, of the governments of European Russia efforts are continually being made to show the peasant farmer the importance of tilling his land in a proper manner and under favorable conditions. The government or province of Ekaterinoslav, in southern Russia, is perhaps a fair example of what has been attempted and accomplished in this direction.

The Ekaterinoslav rural administration, with a view to improving peasant agriculture, has established 32 experimental fields in the 8 districts into which the province is divided, making 4 fields in each district. They are always established in the midst of fields owned by peasantry, from whom the land is rented and whose implements are used in tilling. The fields are sown with local seeds of the best quality and much more thoroughly cleaned than the seeds sown by the peasants. All the other operations incident to gathering the harvest are carried out by hiring the same peasants who had sown the field as day laborers or by piece work, with the object of proving to the peasants that more can be accomplished, on the same soil, with the same implements. By tilling it more timely and carefully the peasants may receive twice or thrice as good results as they receive at present.

This will make it possible for the peasants on the one hand to reduce the area of land sown and to allot a part for cattle grazing, and on the other hand to insure to their fields the requisite moisture, proper seasoning, and protection against the detrimental effects of drought.

Another object of the experimental fields is to clearly show the importance of the fallow strip of land in the struggle against rank weeds, in the accumulation and retention of moisture, and in the seasoning of the soil.

As it is not possible to recommend a bleak fallow, in view of economic reasons, the experimental fields contemplate usual fallows, merely broken up as early as possible in the spring. When the summer crops have been sown and the working animals have received from seven to fourteen days' rest, the first plowing of the fallow land begins. The depth of plowing, and the number of harrowings and replowings, must be entirely regulated by the character of the rank weeds, the amount of moisture, and other local conditions.

Naturally, the object of this is to prepare the peasant population for the transition from a nonsystematic agriculture to a four-field culture, viz, fallow, winter crops, pasture, and summer crops, which is the simplest system, and, as a beginning, is the most suitable one as long as the peasantry complain of having too little land, as well as on account of climatic conditions.

For the management of these fields, teachers are selected in the village schools who enjoy the respect and confidence of the people and who have either been employed in land culture or in farming for themselves; and who have voluntarily offered their services to conduct these experimental fields. The sum of $25 is allowed by the rural administration for each field. The total harvest return is left to the manager of the field as his remuneration. He must have an experimental field not less than 8 acres in extent, of which one-third must be fallow, the second sown with winter crops, the third with summer crops. He must render an account to the rural administration regarding the quantity of grain, etc., harvested, and that of the neighboring peasant fields, for the purpose of comparison, and must state his relations toward the local residents. All the fields are managed under the instruction and guidance of the director attached to the rural administration of the province, and the managers of the fields give all requisite explanations to the peasants regarding the preparation of the soil, the importance of the fallow, of good seed, etc., according to the particulars imparted to them by the director.

The annual report for 1895, of the general committee for the installation of school gardens for the province of Ekaterinoslav, states that out of the total number of 500 elementary village schools in the province, 227 schools had gardens or kitchen gardens, or both.

The total area under the 227 village schools was 92¼ acres, and the area under the gardens belonging to these schools was 285 acres, making a total of 377¼ acres.

The total number of fruit-bearing trees in these gardens was 14,974; fruit-bearing bushes (currants, gooseberries, etc.), 18,951; young trees (seedlings or saplings) for planting purposes (in nurseries), 77,076; total, 111,001.

The total number of forest trees was 17,996; bushes not bearing fruit, 38,459; seedlings or saplings for transplanting (in nurseries), 181,865; total, 238,290. There were given to peasants for planting: Fruit trees, 13,589; forest trees, 41,759; total, 55,348.

Besides this, 51 schools had apiaries and 10 had silkworm culture.

The sum of $1,568.35 was spent by the management of these schools in the effort to promote the gardens during 1895; but it is considered quite inadequate to the actual requirements, and it has been decided to invoke the aid of the Central Government.

Owing to the scarcity of food for silkworms and the difficulty of finding a market for the cocoons, silkworm raising has proved to be totally unprofitable. Out of the 30 schoolmasters who were engaged in it in 1894 (1½ pounds of grains were hatched), only 10 continued in 1895. At present the mulberry tree is scarce in the South Russian steppes, although it is the intention to plant it extensively for forest purposes. Should this be done silk culture would probably be very successful. In a country which is naturally destitute of wild berries, the first endeavor should be made to grow such trees as bear them.

Bee culture seems to have a good chance of becoming a permanent success, owing to quick returns therefrom; the honey and wax find ready sale, and, besides, the bees do not require such careful protection as orchards.

Kitchen gardens are still more likely to become important, as they supply daily wants. Berry bushes and cherry trees come next in importance, because they give quicker returns and require less care than apple trees, pear trees, apricots, etc.

Vines, if properly selected, correctly treated, and planted in suitable sites, may in time become a very important item in these school gardens, and may induce many peasants to engage in the industry.

Forest trees, it is believed, are likely to have a future only along lanes and roads, in churchyards, graveyards, etc., because, as a rule, the peasants have not sufficient land for grain growing or cattle grazing, and are not able to set aside land for forest trees, which give no immediate profit.

In accordance with a request made by the director of the primary public schools to the curator of the Odessa district of public instruction, courses of silk growing and orchard culture at Ekaterinoslav and of silk growing in Slavenoserbsk were established, to last from the 13th of June to the 13th of July, 1895. For the maintenance of the teachers who came to attend the lectures during that period, the sum of $125 was granted out of the special funds of the Ministry of Public Instruction. In addition to this, the Ministry of Agriculture and State Domains granted the sum of $150 for the promotion of this object, while the rural administration of the Ekaterinoslav district gave $100 and that of Novomoskovsk and of Slavenoserbsk $50 each.

The courses at Ekaterinoslav were attended by 26 male and 3 female teachers and those at Slavenoserbsk by 17 male and 3 female teachers, a total of 49 persons. At the first place forty-two lectures were delivered, and at the second place thirty-two; in addition, all the requisite manipulations were demonstrated and gone through. Further, at the village or borough of Ivanovka, district of Slavenoserbsk, practical instruction was given regarding apiculture, which was brought to a close by visiting a few model bee raisers in the vicinity. Much difficulty was experienced from the circumstance that many of the teachers, not being practical men or acquainted with any labor in connection with the soil, are better able to grasp a public lecture than to carry out practical work, and also from the fact that obstructions are often placed in the way by villagers, who look upon this matter of horticulture, etc., as a hobby of the particular teacher and totally foreign to school education, which, in their opinion, should consist of mere book learning. Much patience on the part of the teachers is required in explaining to such parties the great desirability of spreading practical as well as theoretical knowledge and inculcating a taste for the work in connection with every variety of gardening.

There are 50 teachers who have taken up apiculture, 20 of whom have gone through the regular series of lectures and received practical instruction, while 30 have derived all their knowledge from books. There were altogether in the 51 apiaries, of which

2 belonged to schools and all the others to schoolmasters, 1,040 hives (containing 416 hives of the old pattern, being hollowed out tree trunks, and 624 new-pattern hives, which can be taken apart, as they are made of boards and panes of glass); 222 new swarms of bees were recorded as having been obtained on 21 bee farms, while 21 such apiaries out of this number showed a return of 3,604 pounds of honey and 105 pounds of wax. The total outlay for 30 apiaries is given at $2,951.32, while the annual profit is quoted at $248.25.

It is of interest to note that some of the teachers have begun to sow small plots of ground with phacelia, reseda, melissa, and other plants of a similar nature, by which means not only more, but better, honey has been obtained than the localities in question produced before.

Instances occur in which it is related that pupils become greatly interested in horticulture and in the growth of trees. These avail themselves of the opportunity to plant young trees, which are always given when asked for by the pupils. The traveling inspector saw ten such gardens, which he considered sufficiently satisfactory to induce him to make application for prizes, in the shape of useful books pertaining to gardens, in order to encourage the pupils.

EXPERIMENT STATIONS.

In conclusion, it may be of interest to point out, with reference to stations for the experimental study of rural industry, that up to the present there are very few in Russia that will admit of comparison with those in western Europe.

Of the stations devoted to some distinct specialty and founded by the Government, may be mentioned the following:

The Tiflis silkworm rearing station, which was founded at Tiflis in the year 1887.

The Kharkov bacteriological station, which was established in 1887 for investigating the question of the prophylactic inoculation of cattle as a remedy and preservative against the Siberian plague and other infectious diseases. A sum of $2,500 is granted yearly toward the maintenance of this station.

The chemical station for rural industries, attached to the forest corps, is chiefly devoted to investigations concerning the nature and properties of different soils.

The Caucasian experimental station, in the Koutias government, has for its main object the cultivation of American vines and their acclimatization in Russia.

The Government cotton plantations—one in Tashkend, in the Syr Dariensk district, and the other in the Tiflis government, on the Government estate at Karayask—are showing excellent results.

There are also two rural industrial stations, one for investigations, in the Orlov government, on the estate of Count Tolstoi; the other, experimental, in the Petersburg government; also three establishments, under the administration of the Ministry of Public Instruction, namely, the chemical experimental station for rural industries, attached to the polytechnic school at Riga; the agronomical laboratory, attached to the university at Kiev; and the technical laboratory, attached to the Kiev department of the Imperial Russian Technical Society.

Among the farms and grounds established by local governments and societies for promoting the experimental study of rural industries, some have either been opened on Government lands, of which a free grant had been made for that purpose, or else they receive a money subvention from the Government. Such are the three experimental farms founded by the zemstvos of the Perm government and the Kharkov, Poltava, and Kiev experimental grounds, as well as those established by the Viatka local authorities, the Odessa experimental station, and the experimental ground under the administration of the Imperial Society for the Furtherance of Rural Industries in Southern Russia.

There are others which receive no Government subsidy, such as the seven stations for seed sowing in the botanical gardens at St. Petersburg, Helsingförs, Kiev, Guriev, Riga, Tver, and Warsaw.

MOSCOW.

Under date of March 24, 1898, Consul Smith writes:

There are a number of agricultural schools in Russia, with departments for sheep breeding, for domestic industries, and for instruction in the distillation of wines and spirits. The Government appropriates for these schools 300,000 rubles ($154,200) annually. They are not sufficient to provide all the instruction required, and special classes for teachers have been formed, principally in the provinces of Viatka, Novozibkoff, and Livnsch; but these seem to be of short duration. In the town of Jizdra there is a yearly class, excellently conducted, for teaching gardening, fruit culture, etc.

WARSAW.

Consul Rawicz, under date of November 12, 1897, says:

I have ascertained that two schools for gardeners, which existed for a number of years at Warsaw and at Czenstochowa, were closed two years ago.

During the present year, however, the educational department has opened at Warsaw, at the pomological garden, a gardeners' school, to prepare instructors for the country gardeners; but, as the institution has existed only a couple of months, it is impossible to say anything about its usefulness or prosperity.

CHANGES OF CUSTOMS DUTIES IN RUSSIA.

Ambassador Hitchcock writes from St. Petersburg, June 14, 1898:

I inclose herewith a cutting from the London Times of June 4, relating to certain changes in the customs duties of Russia. I have made application for copies of the ukases covering ships and gold-mining machinery and articles imported into Siberia by sea. With regard to the change in the tariff on agricultural machinery, the new law has not yet been promulgated.

[From the London Times, June 4, 1898.]

In response to persistent agitation and the recommendations of several commissions, the Russian Minister of Finance has just decided to admit a number of various imports free of duty and to reduce the duties on certain others. These concessions, although temporary and experimental, constitute certain relaxations of the hard-and-fast tariff of 1891. First of all, as likely to extend the large amount of work already done for Russia by English shipbuilders, comes a ukase abolishing the high duties on sea-going vessels built abroad. Freedom from duty is granted for ten years from July 1 next on iron vessels for external navigation not imported in pieces; on steam yachts, dredgers, ice breakers for seaports, floating docks, chains, anchors, and wire cables for ocean-going ships and all vessels for service under the Russian flag on the Danube. A reduced duty of 20 rubles gold ($10.28) per ton of carrying capacity is to be charged on iron vessels for rivers, lakes, and the Caspian Sea; also on tugs, barges, and floating cranes for work at ports on the Russian Pacific coast; besides 3 rubles ($1.54) per square foot of boiler-heating surface in steamers of this category. The duty on wooden sea and river boats imported whole is fixed at 8 rubles ($4.11) per ton, with the addition of the above-mentioned boiler tax.

It is evident that the heavy duty on imported ships, amounting to 25 and 30 per cent of their cost, has not had the desired effect of encouraging native construction. Some say it is because Russian builders have not been sufficiently helped by subsidies and premiums, as well as by protection against foreign competitors. In any case, they will still be protected in this respect by the above-mentioned duties on vessels for internal use, while, in view of the impending prohibition of coasting under foreign flags between different Russian ports, the abolition of the duty on sea vessels will enable Russians to buy abroad all the vessels which the change will render necessary, and which they can not have made at home.

M. Witte has also at last settled the much-debated question of the duties on imports into Siberia by direct sea route. The Moscow manufacturers, who claim the Siberian market exclusively for themselves, raised powerful opposition to the free importation by English shippers at the mouths of the Ob and Yenisei. The

Siberians of the Yenesei Basin, however, were tired of paying tribute to Moscow in the form of exorbitant prices, and those on the Ob were anxious to have English purchasers and cheap sea carriage for their surplus wheat, which, even in this year of dearth and distress in many of the Russian provinces, lies piled up along the railway beyond Cheliabinsk in thousands of tons, awaiting buyers and rolling stock.

A special commission discussed the subject here several months ago with Muscovite, Siberian, and English representatives. The result, as now determined upon, is that the following imports by sea via Siberian rivers are to be free of duty: Machinery for Siberian gold works, salt, coal, agricultural machinery, and parts of machines, to an unlimited extent; machines for equipping Siberian mills and workshops, fishing nets and twine for the same, certain chemicals—but only in quantities actually required by works in Siberia—tin, lead, and olive oil in the quantities required in each separate business for preparing fish conserves; and sacks to the extent necessary for the actual export of grain. Duties of 4½ rubles ($2.31) per pood on Ob and 4 rubles ($2.05) on Yenisei will be charged on brick tea; so that a Kiakhta tea merchant, who pays only 2½ rubles ($1.29), will be protected and the overland trade preserved from ruin.

The minister has made the above exemptions for the present year and hopes to have them prolonged for the next five years. All machinery for gold mining in Siberia is furthermore made free of duty on all the frontiers of the Empire. Duties are likewise repealed or reduced for five years from September 1 next on agricultural machinery. Steam plows, various kinds of thrashing machines, reapers, sorters, harrows, etc., will be free of duty, while duties on other special kinds will be reduced from 1.20 rubles (62 cents) to 50 copecks (25.7 cents) per pood. Finally, duties on nearly all chemical manures and remedies against diseases of trees and vines are abolished.

A report covering similar information as to the changes in the Russian tariff has been received from Consul Smith, of Moscow, bearing date of June 7, 1898.

FRENCH DUTIES ON AMERICAN PORK AND LARD REDUCED.

I transmit herewith the official text of a decree issued by the President of the French Republic and published in the Journal Officiel, together with an English translation of said decree, concerning the reduction of French import duties on pork products and lard produced in the United States, in conformity with the reciprocity provisions recently concluded between the United States and France.

E. P. MacLean,
Vice-Consul-General, in Charge

Paris, *June 10, 1898.*

[Translation.]

The President of the French Republic, considering the law of January 11, 1892; considering the law of January 27, 1893; considering the law of April 5, 1898, article 4; upon the reports of the Minister of Commerce, of Industry, of Posts and

Telegraphs, and upon the advice in conformity therewith of the President of the Council, Minister of Agriculture, of the Minister of Foreign Affairs, and of the Minister of Finance, decrees:

ARTICLE 1. The customs duties provided for in the minimum tariff shall continue to be applied, provisionally, in France and in Algeria, to the products and manufactures of the United States of North America mentioned in the law of January 27, 1893.

ART. 2. The duties provided in the minimum customs tariff for manufactured pork products (No. 17 bis) and for lard (No. 30, paragraph 2) shall be applied, provisionally, in France and in Algeria, to the products of the classes specified, produced in the United States of America.

ART. 3. The Minister of Commerce, of Industry, of Posts and Telegraphs, and the Minister of Finance are charged, each as to that which concerns him, with the execution of the present decree, which shall be published in the Journal Officiel and inserted in the Bulletin des lois.

Done at Paris, May 28, 1898.

FÉLIX FAURE.

By the President of the Republic:

The Minister of Commerce, of Industry, of Posts and Telegraphs,
HENRY BOUCHER.
The Minister of Finance,
GEORGES COCHERY.
The President of the Council, Minister of Agriculture,
J. MELINE.
The Minister of Foreign Affairs,
G. HANOTAUX.

PROPOSED CHANGES IN URUGUAYAN TARIFF.

The Department has received a report from Consul Swalm, of Montevideo, dated April 23, 1898, calling attention to the appointment of a commission by the President of Uruguay for the modification of the present tariff laws and the general system of taxation. This is of much importance, says Mr. Swalm, to American trade, since an opportunity will be given to change the classifications so as to benefit many lines of our merchandise. The commission will act and report within the year 1898. The consul incloses a review of the decree, taken from the Montevideo Times of April 23, 1898, as follows:

TRIBUTARY REFORM.

The decree which we translate elsewhere, appointing representative committees to revise the principal tributary laws, is one of the most important administrative measures yet taken by Señor Cuestas's Government, and indicates his intention to lose no time in fulfilling the promise he gave not long ago. It has come as a pleasant surprise to the market, for no hint had been given that it was in preparation so soon; but we do not hesitate to say that the impression it has created is excellent on all sides. We have expatiated too often in these columns on the oppressive and prejudicial character of the present tributary system of the Republic for it to be necessary to say anything now in defense or explanation of the decree. Such a step is just as necessary a part of the regeneration of the Republic as electoral reform is of its political reconstitution. Without it, it would be almost impossible, however favorable the political aspect, for commerce and industry to develop in the manner warranted by the great resources of the Republic, or to recover from the precarious position in which they have been placed by the bad and oppressive governments of recent years.

The citizens named to form the two revising committees could hardly have been chosen with better discernment, for they will bring both practical knowledge and the right spirit to bear on their task.

The modification of the customs duties will be of interest to the bondholders of the Republic, on account of the lien on those duties to guarantee the services of the foreign debt and of the railways. How far they will be affected, it is not possible to say until we have some knowledge of what modifications are proposed; so we must leave consideration of that part of the subject until future opportunity.

BRAZILIAN CONSULAR FEES.

The Department is in receipt of a note from the Brazilian legation, dated Washington, May 28, 1898, inclosing copy of a decree by the Government of Brazil increasing the consular fees, with a list of the new charges. The inclosure, translated, reads:

DECREE OF MARCH 14, 1898, ESTABLISHING A NEW LIST OF CONSULAR FEES.

The President of the Republic of the United States of Brazil, in the exercise of the authority granted to him by article 2, No. V, of law No. 489, of December 15, 1897, hereby decrees as follows:

ARTICLE 1. The list of consular fees accompanying this decree shall take the place of the list of consular fees which was appended to decree No. 1327, of January 31, 1891.

ART. 2. This list shall go into operation on the 1st day of May next, in accordance with the instructions appended, which are signed by the Minister of State of Foreign Relations..

PRUDENTE J. DE MORAES BARROS.
DIONYSIO E. DE CASTRO CERQUEIRA.

Federal Capital, March 14, 1898, tenth year of the Republic.

List of the consular fees to be collected at the consulates and vice-consulates of Brazil in virtue of decree No. 2832 of March 14, 1898.

Service.	Charge.	
	Reis.	
1. Authentication of the manifest of a vessel, the tonnage being computed according to the laws of the respective countries, up to 500 tons, on each ton for the first port	100	$0.05,4
2. Id., for other ports	50	.02,7
3. On excess for the first port	10	.00,5
4. On excess for other ports	5	.00,2
5. Visé on each bill of lading	2,000	1.09
6. Bill of health of each vessel in places where there is no office issuing such bills, or visé of same	10,000	5.46
7. Visé of crew list	5,000	2.73
8. Register of crew	10,000	5.46
9 Change in the crew list, for each man	1,000	.54
10. Sailing permits to vessels	20,000	10.92
11. Indorsement on the sailing permit of a vessel	3,000	1.63

List of the consular fees to be collected, etc.—Continued.

Service.	Charge.	
	Reis.	
12. Certificate that a vessel has entered port in ballast, each one	12,000	$6.55
13. Inventory of a vessel	24,000	13.10
14. Inspection of a vessel	24,000	13.10
15. Inspection of goods on board	24,000	13.10
16. Authenticating a new log book and affixing consular officer's signature to each folio	100	.05,4
17. Change from the national to a foreign flag, including register and taking charge of ship's papers, in addition to the excise tax	30,000	16.38
18. For changing a foreign flag to the national flag, in addition to the excise tax	10,000	5.46
19. Changing the national to a foreign flag, including register and taking charge of the ship's papers, on the price of the annual rental	2 p. ct.	....
20. For changing a foreign to the national flag, on the price of the annual rental	1 p. ct.	....
21. Appointment or approval of the appointment of a captain and his registration	5,000	2.73
22. Charter party	10,000	5.46
23. Visé of a log book	2,000	1.09
24. Public sale of damaged goods or others belonging to the cargo of a vessel, to the amount of	1½ p. ct.	....
25. On any excess	1 p. ct.	....
26. Taking charge of articles belonging to the cargo and hull of a wrecked vessel, on the value or amount	2½ p. ct.	....
27. Registration of a Brazilian in the list kept at the consulate, and issuance of a certificate of nationality	4,000	2.18
28. For the renewal of such certificate	2,000	1.09
29. Passport issued to a person	6,000	3.27
30. Visé only	3,000	1.63
31. Visé of a certificate of nationality	2,000	1.09
32. Annual visé of a certificate of registration	2,000	1.09
33. Inventory of property left by a deceased person, to an amount not exceeding	5 p. ct.	....
34. On all in excess of that amount	1 p. ct.	....
35. Will	20,000	10.92
36. Approval of will	10,000	5.46
37. Opening of will	10,000	5.46
38. Contract of purchase and sale and articles of partnership	10,000	5.46
39. A power of attorney or commission empowering a person to act	10,000	5.46
40. Acknowledgment of signature or authentication of any document not executed at the consulate	5,000	2.73
41. Certificate per page or part of a page	2,000	1.09
42. Consular certificate or attestation for use at any time	4,000	2.18
43. Registration of any document in the books of the consulate, provided such document be not the manifest, bill of health, crew list, or sailing permit, per page or part of a page	2,000	1.09
44. Searches in the books or papers of the consulate, beside the fees for certificates, per annum	1,000	.54
45. If the party mentions the year	500	.27
46. Translation of any document, per page or part of a page	5,000	2.73
47. Attendance of the consul at proceedings that require his absence from the consulate, for each day or each three miles of distance, in addition to expenses of transportation, if any there are	10,000	5.46
48. Attendance of the consul at any sale, when his presence is required, commission at the rate of	2 p. ct.	....
49. Inspection of goods on land	15,000	8.19
50. Appointment of experts, each one	5,000	2.73
51. Examination of witnesses, each one	10,000	5.46
52. Protest or declaration	10,000	5.46
53. Certificate of life	5,000	2.73
54. Money received or deposited for the account of individuals, commission at the rate of	2½ p. ct.	....
55. Drawing up and registration of a contract when the amount involved does not exceed	1 p. ct.	....

List of the consular fees to be collected, etc.—Continued.

Service.	Charge.	
	Reis.	
56. On excess	¼ p. ct.	
57. Instrument of dissolution of partnership	20,000	$10.92
58. Money expended for the account of private parties	5 p. ct.	
59. Authentication of copy or comparison of the translation of any document made outside of the consulate, for the first page	2,000	1.09
60. For each subsequent page	1,000	.54
61. Authentication of invoices	5 000	2.73
62. Copy of any document written in a foreign language, for the first page	2,000	1.09
63. For each subsequent page	1,000	.54
64. Decision of an arbitrator when for a determinate amount:		
Not exceeding 500 milreis ($70)	2,000	1.09
Not exceeding 1,000 milreis ($140)	4,000	2.18
Not exceeding 3,000 milreis ($420)	8,000	4.36
Not exceeding 5,000 milreis ($700)	12,000	6 55
Not exceeding 10,000 milreis ($1,400)	20,000	10.92
On 10,000 milreis ($1,400) and upwards, for each 1,000 milreis ($140)	2,000	1 09
65. When the value is an indeterminate one, or on an article of no value	10,000	5.46
66. Any official document or instrument not named or enumerated in this list, not containing more than 100 words	5,000	2.73
67. For each additional 100 words	2,000	1.09
68. Anything not specified in the list	5,000	2.73

DIONYSIO E. DE CASTRO CERQUEIRA.

FEDERAL CAPITAL, *March 14, 1898.*

INSTRUCTIONS FOR THE COLLECTION OF THE CONSULAR FEES REFERRED TO IN DECREE NO. 2832 OF MARCH 14, 1898.

ARTICLE 1. Vessels must carry manifests equal in number to the ports to which they are bound, and must pay for that which is to be presented in the first port the full fee required and for each one of the others one-half.

ART. 2. A vessel receiving cargo in several foreign ports for Brazilian ports must have the manifests authenticated in each of those ports.

ART. 3. The basis for the collection of fees for authenticating manifests shall be the total tonnage of the vessel.

ART. 4. When steamers are concerned, the total tonnage is understood to be the net and not the gross tonnage.

ART. 5. The tonnage of every vessel for the collection of fees for authentication of the manifests shall be that which shall appear from the certificate of registry, the sailing permits or a document equivalent thereto, reduced to Brazilian tons of 2.83 cubic meters, according to article 573 of the consolidation of the customs laws and revenue schedules.

ART. 6. For the authentication of the manifests of a foreign vessel, it shall not be necessary to repeat in full the fees of the proper table the number of times equal to the number of ports in which the vessel shall load; the fees shall be received in full only in the first port of clearance, and one-half thereof shall be received in the others, whether they are or are not in the same consular district. To that end the consular agent of the first port shall give, gratuitously, to the captain of the vessel, a certificate of the fees paid.

ART. 7. Certificates showing that a vessel has not taken in or discharged cargo and has not discharged merchandise or any article whatever, or, if it shall have done so, stating the quantity or number of the goods discharged, shall pay a fee of 4 milreis ($2.18), as a certificate to be used at any future time.

ART. 8. Vessels having only passengers and their baggage on board, and those which receive passengers in intermediate ports only, shall be obliged to pay, beside for coal, merely the fee for those certificates—that is to say, 4 milreis ($2.18) for each.

ART. 9. Bills of lading for goods in transit, bound for foreign ports, need not be viséd, and no fee shall be required thereon.

ART. 10. Vessels shall pay a fee of 12 milreis ($6.55) a number of times equal to the number of the certificates showing them to be in ballast that they shall require.

ART. 11 Fees for visés of bills of lading shall be collected from captains or owners of vessels for the series of bills of lading appended to the manifest, stamps being affixed to the consular declaration which accompanies them.

ART. 12. No consular fees shall be collected for authenticating bills of lading of goods shipped for the account of the British Government, by way of reciprocity for the nonrequirement of any payment by British consulates in similar cases.

ART. 13. Passports issued to diplomatic ministers, consular officers, public officers engaged in the transaction of Government business, indigent Brazilians, and immigrants shall be free, and therefore shall require no stamp. The same shall be the case with visés placed upon documents belonging to immigrants.

ART. 14. For powers of attorney, which, at the request of the parties interested, shall be registered at the consulates, the fees shall be collected which are provided for the registration of any document—2 milreis ($1.09) per page or part of a page—and the recognition of signatures—5 milreis ($2.73) for that of each one.

ART. 15. For those which shall be entered in the books of the consulate, according to the circular of the third section of this Ministry, No. 11, of May 15, 1893, consuls shall collect 10 milreis ($5.46) for copy, duly authenticated and written on a half sheet of paper whose dimensions shall not exceed 33 centimeters in length and 22 in width.

ART. 16. For powers of attorney, when the number of persons issuing them is more than one, each shall pay a fee of 10 milreis ($5.46). The following powers of attorney are, however excepted: Those of husband and wife, brothers and sisters, and joint heirs for inventories and joint estates, university, chapter, council, brotherhood, confraternity, commercial, scientific or artistic associations, all of which shall pay as if the power of attorney were issued by a single person.

DIONYSIO E. DE CASTRO CERQUEIRA.

FEDERAL CAPITAL, *March 14, 1898.*

NICARAGUAN RAILWAY FOR SALE.

I have to report that the railway system of Nicaragua, owned and operated by the Government, now offered for sale,* was completed in 1885-86 and is in two sections of 58 and 32 miles, respectively, with about 3½ miles of side and switch tracks, and 4 miles of a branch road recently completed, with further extensions of the same under way. It is a narrow-gauge railroad. There are three small lake steamers belonging to the system.

According to an inventory taken in 1893, the railway, boats, docks, etc., were worth $1,798,634 (American gold). I am unable to obtain a copy of the inventory so as to show the property in detail; nor can I give exact data as to the freight tonnage, but I estimate it to be, under present conditions, about 60,000 tons per annum, and capable of such increase as the development and improved conditions of the railway system and of the country will warrant.

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* See CONSULAR REPORTS No. 211 (April, 1898), p. 445; No. 213 (June, 1898), p. 310.

It is estimated that to put the railway system in good order an expenditure of about $100,000 is necessary, to be used in the following manner: Purchase of 100 box cars at $400, $40,000; 3 engines at $8,000, $24,000; reconstruction of the Paso Caballos bridge, $12,000; necessary repairs of the track, $24,000; total, $100,000. The gross earnings of the system for nine years, 1886–95, were $2,017,209, and the expenses for the same period, $1,438,238; leaving a net earning of $578,971. The average annual gross earnings for the first three years were $159,666, and the average annual expenses for the same period were $94,043. The average annual gross earnings for the following six years were $256,368, and the average annual expenses for the same time were $192,686.

It is well, perhaps, to direct especial attention to the fact that the operating expenses have been allowed to entirely absorb the increased earnings.

The net earnings of $578,971 for the period of nine years indicate a dividend of about 3½ per cent on the valuation of $1,798,634. If this railway system has been able to earn 3½ per cent under Government management, subject, as it has been, to all the harassing incidents of the military exigencies of the country in the last four years (1894–98), due to constantly recurring revolutionary efforts, and finally to the preparations for war with Costa Rica, it should become a most valuable property in the hands of foreigners and conducted according to the American system of railway management.

The Government price for the railway system is understood to be $2,500,000; and in this connection it may be well to state that the Government owes a foreign debt of $1,400,000, with two years unpaid interest at 4 per cent; and it is supposed that the desire to pay off this debt is the main object of the Government's purpose to sell.

It is believed that the Government would award a most valuable concession in order to effect a sale and have the railway system pass under the control of capitalists who would be disposed to improve the present system, and thus aid in the development of the resources of the country. It is thought that in addition to privileges of the most valuable nature, concessions would be given for the construction of additional railways, either as branches or independent lines, or for an extension of the present system to a point on the Atlantic, For the sum of $2,500,000 cash and a reasonable guaranty to build a railroad from Lake Nicaragua to some point on the Atlantic Ocean ("Monkey Point," for instance, a distance of about 80 miles), in order to afford interoceanic communication and transportation, I believe that a perpetual title to the system, 1,000,000 acres of land, to be selected from any part of the public domain, and practically a monopoly of the railroad construction and traffic of the country would be given.

From present indications it would seem that Nicaragua is entering upon an epoch of peace and prosperity, and that she is eager for the assistance of foreign capital to aid in the development of the country, lavishly endowed, as it is, with natural advantages—with a climate agreeable and healthy and free from extremes of heat and cold, with a soil capable of the highest state of cultivation and production, with forests of valuable timber, and with fabulous mineral wealth safely hidden from every effort of exploitation except that of capital.

The greatest need of the country to-day is means of reliable and quick communication between the Atlantic Ocean and Lake Nicaragua, to connect with the present national railway system from the lakes to the Pacific Ocean, in order to insure interoceanic transportation.

The construction of the Nicaragua Canal would enhance the value of railway properties, because, while interoceanic travel would be lost, this would be offset by the local traffic resulting from the increased tide of immigration.

The system as it exists to-day, in view of the improvements of the harbor at San Juan del Norte (Greytown) and of the San Juan River contemplated and even now being vigorously prosecuted by the Caribbean and Pacific Transit Company (the old Atlas Line), will result in an enormous increase in traffic.

The opportunity for investment of American capital is golden, and the influence on commerce between the United States and Nicaragua, with the railway system of the country under the control of Americans, would be well worth careful consideration, not alone as to the gain to the United States, but as to the loss of trade which would inevitably follow if it should be controlled by commercial interests other than our own. These opportunities will not remain open very long; indeed, a strong effort is now being made to secure them by a powerful English corporation.

WILLIAM B. SORSBY,
Consul.

SAN JUAN DEL NORTE, *May 5, 1898.*

STEAMSHIP SERVICE IN NICARAGUA.

I have to report that the Caribbean and Pacific Transit Company, successor to the Atlas Steamship Company, has taken final possession of the property of the Nicaragua Mail Steam Navigation and Trading Company,* and that the Government formally returned the river and lake steamers on the 10th instant, they having been in the Government's possession for the past three months.

Transportation is resumed, and freights for the interior, which have been detained here on account of the temporary suspension, are now being moved.

The control of the San Juan River and lake transportation facilities by the Caribbean and Pacific Transit Company will insure systematic handling of freight and good passenger service for the interior. If this company succeeds in acquiring the Nicaragua national railway system, it will have an interoceanic system of transportation and will influence, if not control, through and local freight and passenger traffic on the railway line, except to Corinto; and it will be able to compete with the Panama Railroad Company and the cooperating steamship companies for New York and European freights and passengers.

The Nicaragua route would include a trip on the San Juan River, a delightful passage on the magnificent inland seas of Nicaragua (lakes Nicaragua and Managua), and a railway journey between Managua, the capital, and Corinto, the Pacific port, presenting scenery second to none in the tropical zone. For tourists this route would be especially inviting and instructive, if stop-over privileges were allowed on tickets to enable the travelers to visit places of interest, of which there are many in the country.

WILLIAM B. SORSBY,
SAN JUAN DEL NORTE, *May 11, 1898.* *Consul.*

STEAMSHIP CONTRACT IN NICARAGUA.

Consul Sorsby sends from San Juan del Norte, under date of May 14, 1898, copy of the contract between the Government of Nicaragua and the Pacific Steam Navigation and South American Steamship companies, of Valparaiso, Chile.† The principal features of the contract are as follows:

The companies are to give service according to an established itinerary between Valparaiso, Chile, and ports of Central America as far as Ocos, Guatemala. A steamer shall arrive once every week at Corinto or San Juan del Sur and make two connections each month at Colon for New York. In case of the extension of the service to Mexican or Californian ports, the itenerary may be modified; but in no case shall the steamers touch at Corinto or San Juan del Sur less than four times a month. The steamers are to carry the mails according to the proper regulations, and to convey with a rebate of 25 per cent from the usual tariff workmen, farmers, mechanics, and all others who may immigrate to the State, when coming under contract or engaged by the Government. The same reduction will be made for the transportation of Government cargo and of troops in times of peace; and six round-trip first-class passages between the ports of Corinto and San Juan del Norte will be furnished gratis to the Government. The usual stay of the steamer in each port shall be six hours; but the Government may detain it for twelve hours. During the coffee season, each boat shall reserve space for not less than 150 tons for each trip. The steamers shall be exempt from customs dues, maritime or port, fiscal or municipal charges, and the companies shall have the free use of the national telephones and telegraphs in the service. For each time that the steamers fail to follow the itinerary or are more than eight days late a fine of 100 pesos ($36.50) will be imposed.

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* See CONSULAR REPORTS No. 212 (May, 1898), p. 96; No. 213 (June, 1898), p. 310.

† See "Railway and steamship enterprises in Guatemala," CONSULAR REPORTS No. 213 (June, 1898), p. 218.

The Pacific Steam Navigation Company has the right to extend the service of its boats that ply in the cattle traffic on the coast of Colombia from Panama to Chiriqui, to San Juan del Sur, Corinto, or other port in Nicaragua; if these trips are made, the steamers will have the privileges specified in this contract.

The companies are to submit the itinerary and freight and passenger tariff to the Government before they go into effect. The companies are not to carry troops or munitions of war from any port at which they touch to a port in Nicaragua, when it is evident that war or pillage is intended. Wines, liquors, or other dutiable articles are not to be sold in the ports by employees of the companies. The companies can maintain coal deposits, either on land or on floating pontoons, without import or other charges.

For the services above stipulated, the Government is to pay the companies an annual subvention of 9,000 pesos ($3,285), the payments to be made every three months. Differences which arise between the Government and the companies in regard to the interpretation of the contract shall be referred to arbitrators. The contract is to take effect from the date that the first steamer leaves Panama and will last two years, with the option of continuing two years longer if notice of abrogation is not given three months before its expiration by one of the contracting parties.

FINE WOODS CONCESSION IN NICARAGUA.

I transmit herewith a copy and translation of a contract between Mr. H. C. Emery, of Chelsea, Mass , and the Nicaraguan Government, which is in the main but a revival of a prior contract.

I am unable to secure a copy of the original (prior) contract, but I think it safe to say that the chief points of difference are to be found in articles 3, 4, 5, 7, 10, 12, and 13.

Under the old contract Mr. Emery paid $1 gold for each log of mahogany, rosewood, or cedar cut and shipped, and his shipments probably averaged 12,500 logs per annum.*

There are at present, according to Consular Agent Clancy, about 20 miles of tramway and about 20 miles of standard-gauge railway, 3 engines, 32 cars, and 600 men employed.

The district covered by the concession has averaged about one tree to the acre and about 2½ logs per tree. A "camp" for houses, dwellings, pasturage, and sawmill is supposed to cost about $25,000, and to require twelve months in preparation and furnishing. A great many mules and oxen are used in hauling the logs to a stream of water or to the railway. Consular Agent Clancy says in a report:

> The territory is virgin forest, through which trails are cut on each side of a stream (or railway) for a distance of 2 miles, with a quarter of a mile distance between each trail. Then from three to six men, who have an accurate knowledge of trees, go through counting and locating the trees in each section of 1 mile long and a fourth of a mile wide.

The 50 miles of railway, which, by the terms of this modified concession, must be constructed in one or fifteen years, at the option of Mr. Emery, will probably be built only where mahogany, rosewood, or cedar is to be found, and as required for the transportation of the logs to the camps and therefrom to the river for final shipment. The terms of the contract seem to recognize the fact that the 50 miles of railway will be built primarily for the convenience and profit of the mahogany company.

The concession for the 10,000 manzanas (about 17,500 acres) of land seems to have been given for the purposes of cultivation only, as the period of title to the lands seems to be limited to the term of the contract—fifteen years. The principal advantage of the land grant, it seems to me, will be in the cultivation of the deserted camps; they having been thoroughly cleared, comprising a considerable area and being usually located on the line of railway, may thus be utilized to considerable advantage and profit.

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* See CONSULAR REPORTS No. 187 (April, 1896), p. 523; No. 196 (January, 1897), p. 139.

The matter summed up would show, without considering the land grant, that Mr. Emery has secured a concession giving him a monopoly of the mahogany, rosewood, and cedar cutting over a vast area of territory known to be rich in such woods, for the term of fifteen years; and he will probably be able to ship not less than 12,500 logs per annum, for which he has paid $20,000 gold cash and will have to pay $10,000 gold per annum for fifteen years if he finds it profitable. If the shipment amounts to but 12,500 logs per annum, at the end of fifteen years he will have shipped a total of 187,500 logs, for which he will have paid the Nicaraguan Government $170,000 gold. Under the old contract, for the same number of logs shipped he would have had to pay $187,500. Probably one of the most distinct advantages likely to accrue to Mr. Emery is that under the present arrangement the only limit to the number of logs which he may cut and ship will be the number of men he can employ, the number of camps he can build, and the number of trees to be found. If 50,000 logs per annum should be cut and shipped, the Government would receive but $10,000 per annum.

I regard the Emery concession as being immensely valuable; indeed, with one exception, the most valuable of any recently granted by Nicaragua to foreigners.

WILLIAM B. SORSBY,
Consul.

SAN JUAN DEL NORTE, *May 3, 1898.*

The National Legislative Assembly decrees approval of the contract celebrated between the Minister of Public Works, representing the Government, and Mr. Herbert C. Emery, for himself, in the following terms:

ARTICLE 1. The contract between Mr. Herbert C. Emery and the Government, made on the 24th of July, 1894, and ratified by Congress the 27th of the same month and year, is hereby prorogued for the term of fifteen years, counting from the date of the termination of the said contract.

ART. 2. The stipulations contained in the said contract are also to govern the terms of this, with the changes herein indicated, with the exception of articles 1, 2, 3, and 4, which have been complied with by Mr. Emery.

ART. 3. Mr. Emery is bound to construct 50 miles of railway for his works (company) between Rio Grande (Grande River) and El Kuringuas, Laguna de Perlas (Pearl Lagoon), of 3 feet 6 inches or 4 feet 8½ inches (English) wide; and, commencing at "Camp Number 9," near La Cruz (the Cross), and the line to be located through (on) the public lands of the department of Matagalpa. The rolling stock for the road, stations, workshops, wharfs, bridges, and all other constructions necessary for good passenger and freight service, and for the security thereof, must conform with the plans of an engineer to be selected by Mr. Emery and approved by the Minister of Public Works. The entire property, in good condition, will revert to the Government, without any cost whatever, at the termination of this extension, *i. e.*, fifteen years.

ART. 4. In consideration (or ratification) of this extension, Emery must pay to the Government of the State a premium of $20,000 gold, in good mercantile drafts on Boston or New York—$10,000 at thirty days' sight and $10,000 at sixty days' sight. Mr. Emery also binds himself to pay as a premium and in advance the sum of $10,000 (American gold) per annum, this premium to be paid on the first of each year to the "Administracion de Rentas," at Bluefields, in mercantile drafts on Boston or New York, during the fifteen years of the extension.

ART. 5. The State concedes to Mr. Emery 10,000 manzanas of public lands in the department of Felaya or Matagalpa for cultivation during the term of this contract, the lands to be in "tracts" or "lots" of 500 manzanas each (about 875 acres), taken alternately with lots or tracts of the Government; all of these lots to be measured (surveyed) by Mr. Emery in conformity with the laws in force, and their corresponding titles to be provisionally delivered before cultivation and definitely after cultivation.

ART. 6. All of the employees and operators of the work shall be exempt from military service in the time of peace and free from the payment of all fees for passports.

ART. 7. The Government concedes to Mr. Emery the right to import for use of the company the following articles free of all fiscal duties: Flour of wheat and corn, salt and conserved meats, dry and preserved fish, preserved vegetables, preserved fruits, sugar, salt, tea, pickles, coffee, vinegar and sauce, onions, cheese, lard, butter, oatmeal, maize, condensed milk, medicines, sirup, crackers and macaroni, common soap, hops, brooms, "perlinas," mustard, shoes, coal, and forage for cattle and horses, and articles necessary for the protection of machinery and buildings, for the construction and protection of the wharfs, railway, and buildings necessary for the works (company). An authenticated list of the goods imported must be presented to the inspector-general of the Atlantic coast, together with an original bill, for the purpose of comparison.

ART. 8. Emery shall not sell or transfer to persons not connected with the company any of the articles expressed in the foregoing clause which shall have been admitted free of duty by virtue of this concession, and any violation of this provision, if proven before the ordinary tribunals of the country will subject the articles proven to have been sold or transferred to double the rate of duty provided in the tariff of customs of the Government. Emery must submit to the laws in force for the operation of the present article.

ART. 9. Emery will lose his rights to the lands named in article 5 unless they have been put in cultivation before the termination of this contract.

ART. 10. When Mr. Emery has once worked (cut the mahogony) in a tract of 500 to 1,000 manzanas and, the year after, set out a plant for each tree cut, the Government will take possession of the land for whatever uses it sees fit, and Mr. Emery will not have the right to again work (cut) in those sections. Article 8 of the contract of July, 1894, will conform herewith.

ART. 11. Within fifteen days after Emery or his agent has given notice, the inspector-general of the Atlantic coast will nominate an employee to receive the plants treated of in the foregoing article. And if Mr. Emery does not ask for the nomination of this Government agent before the end of the year in which the plants referred to must be planted, or if the number of plants is less than that stipulated by the contract, a fine of 1 peso for each plant in default will be imposed.

ART. 12. In the event that Mr. Emery does not deliver the 50 miles of railway to the Government to its satisfaction and in conformity with the stipulations of article 3 he will forfeit to the Government the sum of 50,000 pesos in the current money of the country, the payment of which shall be guaranteed by all of the property and rights of the company, which shall not be sold, mortgaged, or transferred to anyone under any title whatsoever.

ART. 13. Emery may transfer this contract to any other person or company. but neither he nor his successors shall be entitled to any international reclamation.

ART. 14. Differences that may arise between the parties will be submitted to a tribunal of arbitration, which must be organized in the State, and which will be composed of one member to be nominated by the Government and one member to be nominated by the owner of the concession The arbitrators nominated shall, before they are informed of the facts of the case in controversy, name a third arbitrator, who will act in the event of a disagreement. The decision of the arbitrators will be final, and all must be in accord with the legislation of the country.

JOSÉ C. MUÑOZ.
H. C. EMERY.

MANAGUA, *March 2, 1898.*

OPENING OF PORT IN HONDURAS.

I transmit the decree opening the port of Utilla and Bonacca, on the Bay Islands. Although this decree went into force April 1, no action to make it a port of entry has taken place.

An export duty of from 2 to 3 soles* has been placed upon cocoanuts shipped to the United States. Whether it is levied by the Government or by the municipality, I can not learn; but it is collected, I am informed, by the schooner and sloops that gather the cocoanuts from the producers on the islands.

BENJAMIN JOHNSTON,
Consul.

UTILLA, *June 1, 1898.*

The National Congress decrees:

ARTICLE 1. The custom-house of the (smaller) port of Utilla is reestablished for the importation of merchandise by the inhabitants of the island, on the following conditions:

(1) The total amount of duties shall not exceed 200 pesos ($81).

(2) There shall be previously presented to the officer of the port, to be brought to the knowledge of the customs administrator at Ruatan (who has charge of the whole), memoranda of the amounts to be collected; these to be, as far as possible, in conformity with the respective invoices.

ART. 2. For the registry of the merchandise imported in virtue of this law, the officer of the customs (Guardamaritimo) shall act as lieutenant-administrator until this office is created; and the local commandant as accountant (Contadorvista). The registry of the goods should further take place before the municipal alcalde as inspector (fiel de peso). The warehouse shall be in charge of the officer of customs (Guardamaritimo). and the importers of goods must ask that the registration be made as quickly as possible. within the terms fixed by the law.

ART. 3. The employees referred to have the same duties and responsibilities as those indicated in the code of customs. under the immediate charge of Ruatan.

ART. 4. The registration of goods belonging to merchants who are not of the island, and the granting of permits for merchandise registered here and destined to other points on the mainland, are absolutely forbidden. An officer violating this disposition shall be removed, and the goods considered contraband.

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*The peso, the unit of value in Central America, is probably meant. It was valued by the United States Treasury, April 1, 1898, at 40.9 cents.

ART. 5. The dispositions of this law are applicable to the importation of goods to the Island of Bonacca.

ART. 6. The present law will be in force from the 1st of April.

Given in Tegucigalpa, in the Hall of Sessions, on the 14th day of March, 1898.

ALBERTO UCLÉS,
President.

BANKING IN SALVADOR.

Congress in its last regular session passed a banking law, the principal features of which had for object to compel the banks to redeem their notes in silver. The law became effective on the 11th instant. Prior to the above date, meetings were held to denounce the measure, and others to praise Congress and the President for their wisdom.

The Banco Industrial del Salvador has gone into liquidation, and it is rumored that the oldest bank in Salvador, after paying off its notes, will fuse with the Salvadorean Bank, leaving four banks instead of six.

The number of banks in existence caused great competition, which, together with the liberal characters of their charters (permitting them to issue 150 per cent more paper than the specie they had in their vaults), caused them to depart from all usages and well-defined laws on banking, so that they became mere speculative institutions. Money was plentiful; crisp, new bills were accepted everywhere, large dividends were paid, and one could be accommodated almost anywhere with a loan. It is reported that banks were charging as high as 24 per cent interest.

Two of the six banks never failed to pay specie for their notes during this entire crisis, while the others suspended.

The low price of coffee has almost ruined the country; for all this, there is abundant material in Salvador to insure prosperity in the future.

JOHN JENKINS,
Consul.

SAN SALVADOR, *April 15, 1898.*

BELGIAN TRADE WITH CUBA AND PUERTO RICO.

As indicative of the interest of Belgium in the situation of Cuba and Puerto Rico, I have undertaken to determine the importance of their mutual trade. It would have been preferable to have ascertained the share of Cuba and Puerto Rico separately, but in all the official statements issued by the Belgian Government the trade to and from these two islands is consolidated. The imports from Cuba and Puerto Rico into Belgium for the past few years have been:

Year.	Amount.	Year.	Amount.
1890	$120,718	1894	$181,034
1891	54,812	1895	69,480
1892	86,271	1896	188,947
1893	62,725	1897	51,338

The products imported into Belgium during 1897 were chiefly: Raw mineral products, $6,192.65; honey, $2,322.85; manufactured sugar, $773.88; lumber, $446.98; cocoa, $386; cigars, $365.38. In 1896, when the trade was much larger than usual, the principal articles of import were: Crude drugs, $15,942.57; grain, $8,902.51; sugar, $2,895; cotton, $2,495.68.

In former years the principal exports from Cuba and Puerto Rico to Belgium have been cabinet woods, preserves, guano, sugar, and dyes. To cite a few figures:

In 1894 the shipments of cabinet woods amounted to $40,916; in 1897 they were zero. In 1893, preserves shipped to Belgium were valued at $10,229. In 1897 there were none. In 1894 the guano imported into Belgium from Cuba was worth $68.515; last year there was none imported. In 1890 Belgium purchased sugar worth $99,202; in 1897, $4,009. In 1891 and 1893 the annual shipments of dyes and colors from Cuba and Puerto Rico to this country amounted to more than $16,000; in 1897 they were zero.

Thus we see that, while the nature of the goods purchased by Belgium varies, there has been in the last few years a decided decline in the purchases of the principal articles.

The statistics of merchandise exported from Belgium to Cuba and Puerto Rico give the following values for recent years:

Year.	Amount.	Year.	Amount.
1890	$1,288,661	1894	$472,850
1891	911,925	1895	382,140
1892	590,580	1896	744,015
1893	461,077	1897	653,112

In 1897 the principal articles of export from Belgium to Cuba and Puerto Rico were provisions and food supplies ($234,084.30), closely followed by metals of all kinds ($228,586.31). Under this latter category the chief items were manufactured iron ($89,660) and manufactured steel ($55,584). Other leading articles of Belgian export were: Glassware, $47,992.54; machinery and tools, $46,825.27; raw mineral products, $28,711; and coal, $21,333.25. These articles have been the chief items purchased in past years by these islands in Belgium. In some instances, however, a notable difference in the values is apparent. For instance, in 1891 the purchases of machinery and tools amounted to $232,372; in 1890 the purchases of metals were valued at $686,694 and in 1891 at $486,939. In 1894 the glassware bought was valued at $93,026. In 1890 the raw mineral products shipped from Belgium to Cuba and Puerto Rico were worth $62,918. Comparing these figures with those previously given for the same articles during 1897, the interest of Belgium in the prosperity and welfare of the two Greater Antilles can be readily seen.

It is scarcely necessary to mention how many articles Belgium produces in large quantities which should normally find a large market in these islands. I name a few, indicating their respective export values for 1897: Firearms, $347.40; yarns, $5,136.56; paper, $3,283.12; chemical products, $1,294.36; textile fabrics, $1,535.09. With peace and a stable form of government in Cuba, the exports of Belgian merchandise to that country are destined to increase. It is therefore with a profound interest that the Belgian industrial world views the present struggle.

HENRY C. MORRIS,
Consul.

GHENT, *June 2, 1898.*

BRITISH VS. UNITED STATES TRADE IN CANADA.

I inclose a clipping from the Canadian Trade Review that to my mind is a good outline of the possibilities of trade in the Provinces. Certainly, United States goods can be sold here to a larger extent than they are. My attention was particularly called to this article by overhearing two business men express their opinion that it was a very fair statement of the condition of trade.

FRANK C. DENISON,
Consul.

WOODSTOCK, N. B., *May 16, 1898.*

[From the Canadian Trade Review, Montreal, May 6, 1898.]

The question is frequently asked why it is that British manufacturers of hardware supplies, tools, bicycles, and the other multifarious goods of that character find it so difficult to compete successfully for popular favor in this country with their rivals from the other side of our political line. It is universally admitted that English-made goods will outwear and outlast any constructed on this continent. Everything in them is of the best, and they are put together with a conscientious exactitude that insures durability. Yet every year sees more of our import trade going to the United States and away from England, until during the fiscal year of 1897 we imported $61,649,000 of goods from across the line, against only $29,412,000 from Great Britain. Of course, the new preferential duty of 25 per cent in favor of the Mother Country may—and it is to be hoped will—increase the volume of goods taken from English firms. But at present the trend of trade is naturally toward a country which thoroughly understands our climate, customs, likes, and dislikes, and away from one which, however closely bound to us by the ties of loyalty, is comparatively strange to us in trade matters.

We may fairly take the cycle trade as an example. Here is a trade in which Britain should certainly excel. British manufacturers have facilities in the shape of proximity of supplies, abundance of skilled labor, and thoroughly equipped plants that are certainly fully as great as anything the United States can boast. It is, therefore, somewhat astonishing to find that during the customs year of 1897 we imported $758,783 worth of bicycles and $254,815 of bicycle parts from the United States and only $26,134 of bicycles and $29,411 of parts from Great Britain.

There is, of course, a very easy solution for this enormous disparity in the volume of cycle purchases from the two countries. It is the point that the Americans know what we want and send it to us. Of course, there is a certain opening here for high-class cycles for the better class of trade. But the staple seller is a prettily decorated wheel, with plenty of nickeling on it, furnished with Dunlop tires, and containing the most important of the latest improvements, which can be retailed at $35 to $50 here. This is the wheel for Canada. And those firms who can furnish it are the ones who naturally can command most trade. It must be remembered that in this country a wheel can practically be used only six months in the year, and that these are the fine summer ones when the roads are in perfect condition. Our riders want a light and cheap—but not common—wheel. They want it as graceful and stylish as possible, as it is for use only in our long summer days. When the fall draws to a close the wheel is put away until spring. Hence the necessity for a wheel that will stand all roads and all weathers is not felt in Canada, where cycling is purely a summer sport. And this fact would have been as patent to our English as to our American suppliers had the former adopted the plan of sending representatives through the country, instead of depending upon the excellence of their goods to sell them.

The same complaint of lack of personal knowledge of our requirements and conditions upon the part of the British manufacturer is made in other lines of hardware and supplies. Canadian dealers complain that the British manufacturer expects them to buy the lines he makes for his home trade, whether they are the ones most popular and best suited to this country or not. He bombards them with catalogues, in an unfamiliar currency and burdened with unfamiliar conditions, of lines which they have never seen and do not know the advantages of, and then feels surprised if they take no notice of him. The man who succeeds here is the man who learns by personal inspection or through trustworthy agents what the people are using and tries to give them something a little better for their money, but of the same class. If his agents can suggest any other alteration or modification that will please the trade, he will make it at once, even if he has to lose at first by doing it. He is always open to suggestions and never knows more than the man he is selling to. And he sells his goods in the money of the country, on the same terms and conditions, and in the same way. In every one of these points he has an argument in his favor over the conservative manufacturer.

PORTLAND CEMENT IN ONTARIO.

A grade of Portland cement, claimed to be fully equal in point of excellence to the English, German, or even the Belgian product, is made of the natural deposit obtained from the bed of Shallow Lake, in the township of Keppell, Grey County, Ontario, 9 miles west of Owen Sound. Its manufacture was begun in 1889 by the Owen Sound Portland Cement Company, and was attended with very great difficulties at first, owing to the fact that but little was known about the processes of its manufacture, and suitable machinery was not readily obtainable.

The lake floods every spring and fall to a depth of several feet, the water leaving, through fissures in the bottom and rock-bound shores, usually about the month of June. Men and teams are then employed to remove a few inches of the waste surface, beneath which the marl lies to the depth of about 3 feet. Under the marl is found the clay, which forms the other ingredient and which is removed with the aid of a derrick, loaded on dump cars, and hauled to the factory on the shore of the lake. A large force of men and teams is usually employed for from six weeks to two months, in order to obtain sufficient material for manufacture during the ensuing fall, winter, and spring.

The quality of the cement has been conclusively tested in the construction of the canal at Sault Ste. Marie and other waterways, as well as in buildings throughout the Dominion.

The supply of ingredients is practically inexhaustible, the lake covering about 600 acres. The daily capacity of the factory is at present 125 barrels, which will be increased to 300 at an early date. The company was originally formed at Owen Sound, where the principal office is now located.

Although the entire plant was destroyed by fire in 1895, the erection of the present extensive factory was immediately begun and will cost, when finished, fully $125,000. Excellent railway facilities, with sidings to storehouses and coke sheds, are furnished by the Grand Trunk Railway Company. About seven carloads of Pennsylvania coke per week are consumed in the manufacture of the cement.

Prevailing prices are $1.90 in jute sacks and $2.10 in barrels, per barrel of 350 pounds, net.

LOTON S. HUNT,
Consul.

PALMERSTON, *June 1, 1898.*

EXHIBIT OF AMERICAN GOODS IN EDINBURGH.

The best way to acquire or to develop a market in a foreign country for American goods not known or comparatively little known in that community is to place samples before the local dealers. Goods adapted to the taste, customs, and needs of the people will speak for themselves effectively.

It is feasible to exhibit samples at this consulate, under certain restrictions. I beg respectfully to submit to the Department a succinct statement of a plan that I have carefully considered.*

The National Association of Manufacturers, the United States Export Association, the Exporters' Association of America, the Philadelphia Commercial Museums, and other organizations interested in the extension of foreign commerce might be notified that the consul would receive and place on exhibition samples of manufactures and other products under these conditions and regulations:

(1) When a member or patron of any such association brings to the attention of the management an article which he would exhibit at the consulate as a sample, an authorized officer of the association should write to the consul for his opinion as to whether the article is suitable for the market, and at the same time ask to be informed of the number of local dealers in such or like articles. The consul's judgment in the matter of suitability should have some weight, but need not control the association's decision in any case. Should the management decide that the exhibition of the goods would prove commercially advantageous, the sample should be sent to the consulate, at the expense of the exhibitor or of the association, with circulars, etc., fully setting forth its uses and merits, and with explicit instruction to the consul as to what disposition to make of it at the end of one month, which should not involve reshipping or repacking at the consulate.

(2) Each of the prominent industrial and commercial associations has, I believe, at least one general representative in Great Britain—and probably in other European countries. On forwarding a sample article to this consulate, the association should instruct its representative in London, who is more or less familiar with the trade in the various cities and who can reach all business houses by consulting the commercial directories, to notify the trade in Edinburgh and vicinity that a sample of a certain ware or product could be seen at the United States consulate. If any association has no such representative, the exhibitor or association could inclose to the con-

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* For a report on a similar subject, see "Proposed American sample room at Leipsic," CONSULAR REPORTS No. 211 (April, 1898), p.. 585.

sul the requisite number of circulars and envelopes, which could be addressed and posted to the local trade, the association assuming responsibility for the expense of postage and the actual cost to the consul of having the work done, for which a voucher would be sent. (This printed circular to the trade might be general in form, with proper blank spaces for the use of all exhibitors belonging to the association.) In this way the attention of the entire local trade could be called to the article exhibited.

(3) Obviously, there must be a rigid limitation to the size of samples and the time of exhibition. A sample should occupy not more than 1 cubic foot of space and should remain at the consulate not more than thirty days after notification to the trade. Heavy machinery or parts of machinery and other bulky wares would have to be represented by models.

(4) It is presumed that the consul would not be expected to recommend any article or to undertake to demonstrate its utility. This must be done by the printed matter accompanying the sample or by an agent of the exhibitor or the association. If such agent desires to make experiments or to do anything more than describe the operation of a machine, or the merits or process of using any article, he should take the sample elsewhere. It is not thought that this consulate or any other could profitably or properly be turned into a shop or mechanical fair.

(5) The main object of this plan of exhibiting samples should be to aid the introduction of new manufactures and other products—new to the community in character, quality, or use. To exhibit samples of common, staple articles—such as most food stuffs—would, I think, be of doubtful benefit, even if it were practicable. The trade knows these products, and the purpose of the proposed exhibition at the consulate is to reach the trade, not the general public. It must be left to the dealers to reach the people.

Within the bounds indicated and under the regulations suggested, the exhibition of samples would, in my opinion, be entirely feasible, and the usefulness of the consular service at this consulate and others where like conditions obtain largely increased.

RUFUS FLEMING,
EDINBURGH, *May 4, 1898.* *Consul.*

METRIC CONGRESS AT PARIS IN 1900.

The uniform numbering of textile fibers is of great importance to the spinning mills and textile manufacturers of the world. At present many different rules are in use, all absolutely dissimilar.

In France, the cradle of the metric system, the numbering "kilometrique"—that is to say, based upon the relations between the weight in demikilograms and the length in kilometers—is only in use for cotton thread and "bourre de soie." Chaos reigns in the international numbering. In fact, few persons can distinguish in the many complicated modes of numbering the exact number of thread intended.

Uniformity in this matter would immensely simplify the technique of the textile industry; but, to accomplish this object, it will be necessary to establish an invariable rule to be applied to all countries.

This question has for a long time occupied the attention of those engaged in this industry. It was the subject of investigation at five successive congresses held at Vienna in 1873, at Brussels in 1874, at Turin in 1875, and at Paris in 1878 and 1889. It is intended to study this subject again at the international exposition to be held at Paris in 1900.

At all the former congresses progress was made, but no practical result has yet been obtained. There are two reasons for the failure—uniformity in this matter has not become general, even in France, and the metric system has not yet been adopted by all countries. England places goods in foreign markets that are not numbered and manufactured according to the metric system, and it is also permitted to be done in the United States. Our country is making strenuous and successful efforts to compete with other nations for foreign trade in merchandise, and, as our capacity to produce is almost unlimited, it would seem that our textile manufacturers should be well represented at the above-named congress in Paris in 1900.

If the exporters of the United States will employ the metric system, they will be able to offer their wares to foreign buyers and consumers in the weights and measures to which they are accustomed.

HENRY W. GILBERT,
LIEGE, *May 12, 1898.* *Consul.*

DANISH COMPLAINTS OF AMERICAN BICYCLE TIRES.

In view of the great efforts made during recent years by American bicycle manufacturers to find and maintain a market in Denmark for their production of bicycles, the wretched quality of the tires received here lately has been unfortunate, and, I fear, has dealt a serious blow to this particular trade.

Danish importers contracted in December last for enormous quantities of American bicycles, and the goods ordered are now coming. They are mostly of the lower grades, and therefore cheap. The bicycles themselves look very smart, and are no doubt good. Nobody complains about them, and the importers who have been wise enough to buy without the American tires are doing well; but the others repeatedly lodge complaints at this consulate about the miserable quality of the tires, which, while they look well, will not hold the air and necessitate constant repairs. If American tire manufacturers do not immediately remedy the evil, which I know to exist from personal experience, as I am often called upon to examine the articles, I fear this important bicycle market will be lost.

JULES BLOM,
Vice and Deputy Consul.

COPENHAGEN, *May 13, 1898.*

PRIZE OFFERED FOR MATCHES WITHOUT PHOSPHORUS.

The Department has received a note from the Belgian minister, dated New York, June 7, 1898, stating that his Government has offered a prize of 50,000 francs ($9,650) for the invention of a match paste containing no phosphorus. A copy of the decree, giving terms, conditions, etc., is inclosed. A report on the same subject has also been received from Consul Roosevelt, of Brussels, under date of May 14, 1898. Mr. Roosevelt translates the important clauses of the decree as follows:

CONDITIONS OF COMPETITION BETWEEN INVENTORS OF A PASTE FOR MATCHES WITHOUT WHITE PHOSPHORUS (POISONOUS PHOSPHORUS INFLAMMABLE AT A LOW TEMPERATURE), IGNITING ON ANY SURFACE.

A.—The competition is international.

B.—Necessary conditions which paste and matches submitted to competition must fulfill are as follows:

The paste must offer to the action of shocks and frictions such a resistance that dangerous explosions may not be apprehended during the process of manufacture. It must not contain any matter which, by its emanations or otherwise, may be dangerous during the process of manufacture to the health of the workmen.

The matches must ignite on any surface (even on cloth). Submitted to alternatives of humidity and dryness, of heat and cold, in the average limits, they must sufficiently maintain their capacity to easily ignite and not be subject to spontaneous decomposition.

The matches, when struck, must not throw off any substance of a nature to burn persons or provoke fires. They must not discharge toxical fumes. Preference will be given to matches the paste of which does not contain any poisonous ingredient. These matches must also not be susceptible to friction, so that under ordinary conditions they will not easily ignite in the consumer's pocket, and that they may be transported and stored without danger in packings commonly employed in this trade.

C.—Inventors are admitted to competition until January 1, 1899, under the following conditions:

(1) They should send, under sealed envelope, a communication giving name,

Christian name, and residence, as well as such device as they may have adopted, which will be reproduced on the sample boxes mentioned in 2 and 3.

(2) They should furnish 250 grams (0.55 pound) of paste in a moist state. This paste will be contained in a glass bottle with a ground-glass stopper placed in a sheet-iron or tin receptacle kept in a wooden box, of which the sides shall be at least 2 centimeters (0.7874 inch) thick. Between the sides of the box and the bottle there must exist on all sides a free space of about 3 centimeters (1.1811 inches), completely filled with elastic matter, such as straw, hay, or wood wool.

(3) They should furnish 10,000 matches at least, packed in pasteboard or paper boxes, containing at most 500 matches and bearing upon each box the adopted device. These boxes will be inclosed in a tin case, hermetically soldered all around to protect the matches from external dampness. The case must be packed in a wooden box, the sides of which shall be at least 1 centimeter (0.3937 inch) thick. Communications and packages will be addressed to M. Woeste, State Minister, president of the committee, Department of Industry and Labor, No. 2, Rue Latérale, Brussels. These communications and packages can be forwarded any time from now until the 1st of January, 1899.

D.—The inventors whose matches fulfill the aforesaid conditions under Title B will have to give proof that the industrial manufacture of said matches is practicable. They must pledge themselves to the manufacture of at least 1,000,000 matches on Belgian territory, in some place designated by agreement between the inventor and the committee, and in the presence of the committee or a delegation of the committee.

BELGIAN INDUSTRIAL ASSOCIATION.

I transmit translation of an interesting article which appeared in Le National of Brussels, April 30, 1898.

GEO. W. ROOSEVELT,
Consul.

BRUSSELS, *May 2, 1898.*

A Belgian industrial association has been formed to encourage the exportation of national products. The organizing members, sixty in number, represent Belgium's greatest industries. The object of the association is to establish a permanent office for the purpose of collecting in foreign countries, either directly or through the intervention of diplomatic and consular agents, such information as creating markets for Belgian products, grants for railways, tramways, lighting, canalization, water distribution, private and public works in general, and contracts of all kinds; transmitting such information as may be of interest to members; also to establish a sample exhibition where goods manufactured by members in view of exportation will be admitted on payment of space rent. A special bureau annexed to this exposition will furnish all necessary explanations to foreign visitors, and put them in touch with interested manufacturers.

There will be organized a bureau giving information as to means of transportation, freight, exchange, custom duties, commercial usages of importing countries, as well as all other trade information. It is also designed to create agencies—commercial and financial branch houses in foreign countries.

The new association assumes the laudable mission of stimulating the initiative of our manufacturers without any thought of benefit to itself. It will apply itself to seeking new markets for our products in every country of the globe.

Persons desiring information on the subject may address themselves to the provisional office, 27 Avenue Marnix, Brussels.

NEW METHOD OF PRESERVING MEAT.

A new method of preserving freshly killed meats has been discovered by the Danish zoölogist August Fjelstrup, already well known through his method of condensing milk without the use of sugar. The system (according to the printed reports) has stood a remarkably hard three months' test at the Odense (Danish) Company's slaughterhouses, in a very satisfactory manner.

The method in itself is extremely simple, and might be of great service for the troops in the Tropics (the writer having had considerable experience in trying to keep meat fresh in Cuba).*

The animal to be used is first shot or stunned by a shot from a revolver (loaded with small slugs) in the forehead, in such a way as not to injure the brain proper. As the animal drops senseless, an assistant cuts down over the heart, opens a ventricle, and allows all the blood to flow out, the theory of this being that the decomposing of the blood is almost entirely responsible for the quick putrefaction of fresh meats. Immediately thereafter a briny solution (made of coarse or fine salt, more or less strong, according to length of time meat is to be kept) is injected by means of a powerful syringe through the other ventricle into the veins of the body.

The whole process takes only a few minutes, and the beef is ready for use and can be cut up at once. This method has been examined and very favorably reported on by the general councils at Odense and Aarhaus, and also by many experts.

OLIVER J. D. HUGHES,
SONNEBERG, *April 27, 1898.* *Consul.*

SLAG BRICKS IN GERMANY.

F. W. Luermann, in an interesting article in Stahl und Eisen, gives his experience in the manufacture of bricks from granulated blast-furnace slag.

The direct production of building and paving stone from fluid slag, he says, is nothing new. Such slag bricks, however, did not prove a suitable material for dwelling houses, because they are, like glass, impermeable to air as well as steam. In human habitations, the aqueous vapor exhaled by the occupants would condense on cold days on both windows and walls, thus rendering the rooms damp and unhealthy. On the other hand, brick manufactured from granulated blast-furnace slag is permeable and hygroscopical—that is, both air and steam can penetrate them.

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* A copy of the report has been sent to the War Department.

The first one to produce granulated slag, or slag gravel for brick making, by passing the fluid slag through water, was Eugene Langen, an employee of the Friedrichs Wilhelm mine, near Siegberg, Westphalia. This process causes disintegration; silica is separated in a soluble condition, in which it easily hardens in the air and combines just as easily with caustic lime. The single grains of this slag gravel, when compressed tightly, are bound by the soluble silica; and when ground to a fine dust, so that the particles come into closer contact with each other, the binding by the silica therein is sufficient for the production of good building bricks. Bricks from ground slag, however, require a longer time for hardening than those manufactured from granulated slag. By mixing granulated slag with dust from slag which has crumbled in the air, good bricks can be produced without any addition of lime; but the hardening process is rather slow. Hardening takes place quickest in from six to eight days with bricks to which about 10 per cent of burned and slacked lime has been added.

Granulated slag, from its passage through water, contains from 19 to 33 per cent of moisture, according to its porosity, a fact which has to be considered in shipping. Its weight ranges between 1,100 and 1,500 pounds per cubic meter (35.3 cubic feet), that of ground slag runs as high as 2,900 pounds. Ground slag can be added to the mixture of granulated and lime when es ecially dense and strong bricks are to be produced.

The bricks may be given any shape desired; and they will preserve this shape, because they are not burned. They show sharp edges and smooth surfaces, and give the best satisfaction when as little mortar as possible is used. The natural color of slag bricks is that of grayish-white sandstone. The weight ranges, according to dryness and slag used, between 6½ and 7 pounds, or about 6,000 bricks to a 20-ton car.

The strength of slag bricks fully equals that of ordinary burned bricks; 24 to 28 pounds per square centimeter (1.55 square inch) is usually considered the highest admissible burden for ordinary bricks. Well-hardened slag bricks can withstand, theoretically, burdens up to 160 and 180 pounds. The resistance of slag bricks to high temperature is quite remarkable. Heated to a pale red, when the carbonate of lime begins to decompose, its strength will not be injured. Even if a part of the lime should be decomposed at such a high temperature, and thus rendered caustic, carbonic acid is again absorbed at a lower temperature, and the brick becomes as strong as it was before. For the construction of chimneys and stacks, slag bricks are used with advantage, as the products ascending contain a large quantity of free carbonic acid, which is delivered to the bricks. For the same reasons, it is well adapted for lining lime kilns and walling in boilers.

Slag bricks are five times as permeable as ordinary burned bricks. Pressure being equal, 10¾ square feet of lightly burned bricks permit in one minute the passage of 23.3 liters of air; slag bricks permit the passage of from 101.2 to 113.4 liters. Their porosity also is greater than that of burned bricks; while they do not absorb water as quickly as burned bricks, they regain their permeability quicker than the latter. A burned brick filled up its pores with water in twelve hours, while a slag brick required one hundred and ninety hours to get thoroughly soaked.

To test whether slag bricks have dried and hardened sufficiently to be safely used, a small piece of brick tied to a string is dipped into a cold concentrated solution of sulphate of soda, and hung up at any place in a room. By the evaporation of the water in the solution and the crystallization of the soda, which in its action resembles the formation of ice, bricks that will not resist frost are destroyed, each crystal needle carrying a little cap of the material from which the brick was produced. Not slag bricks alone, but any other, can be tested in the above-mentioned manner as to their power of resistance to frost.

It is said that slag originating from puddling and Thomas pig iron produces the best bricks, while Bessemer and foundry slag ranks second. The erection of a slag-brick plant in connection with a blast furnace would cost about $5,000. At several German works the cost of production of 1,000 bricks is only 10 marks ($2.38). From 6,000 to 7,000 pounds of granulated slag and 450 to 700 pounds of burned lime are required for the production of 1,000 bricks.

MAX BOUCHSEIN,
Consul.

BARMEN, *May 5, 1898.*

STRIKE OF COAL HEAVERS AT GIBRALTAR.

Consul Sprague, of Gibraltar, under date of May 5, 1898, says:

The present aggravating condition of the exchange market, owing to the depreciation of Spanish currency, has seriously enhanced the prices for the necessaries of life in Gibraltar and its neighborhood, thereby causing great distress among all classes here. It has provoked a general strike among the coal heavers, most of whom are natives of Gibraltar and Malta. They complain that they are paid for their labor in Spanish currency, while the coal dealers who employ them are receiving payment in sterling, thereby retaining a large profit. After several conferences between the contending parties, the coal dealers decided to offer to the strikers an increase of 25 per cent in their wages, which the latter peremptorily refused, demanding full payment in British currency at par. On the 2d instant they went on strike and resorted to open violence, causing considerable disturbance in the streets.

Under date of May 12, Consul Sprague adds:

The dispute between the coal heavers and the merchants was yesterday settled through the medium of the governor of Gibraltar. The coal heavers will continue to be paid in Spanish money, but are to receive 50 per cent on the sterling exchange of the day, which will be known by applying each day at the post-office. The coal dealers may congratulate themselves on the early settlement of the disputes in question, which were already causing considerable inconvenience and losses to those interested in the coal trade at this port.

RISE IN PRICE OF WHEAT IN EUROPE.

All Europe is seriously affected by the great increase in the price of bread. The careful students of economics in Europe have realized that generally, and especially in times of great emergencies, the United States must furnish the principal breadstuffs for the masses; but until to-day the masses little comprehended how much they depended on America for their daily bread, and the experience of the past thirty days has opened wide their eyes to the significant truth that in America is located their reliable and faithful source of supplies. This revelation is now teaching the masses every morning, noon, and night how essential America is to the welfare and happiness of Europe; for where and when bread is high and wages low there can be but little hope and comfort.

This does not depend so much upon the amount of breadstuffs America sends regularly to Europe as it does upon the fact that nearly always, in years of great crop failures, the United States has usually held the balance of power so far as breadstuff resources were concerned, and in each instance our position and supply has determined the cost of the European loaf of bread, which means the comfort and weal of the masses; for in Europe bread and potatoes furnish about 90 per cent of the nourishment of the laboring class.

The people of Switzerland are great bread eaters, but not much of their bread is made from United States flour. Seventy per cent of the wheat consumed in Switzerland comes from Russia. Out of a total of 7,767,043 cwts. imported into Switzerland last year, Russia sent 4,805,946 cwts. and the United States only 528,349 cwts. But, notwithstanding this fact, the chief topic of conversation now is, What is the supply of American wheat? What will be the effect of the war on the price of it? And, most important of all, what will be the cost of a loaf of bread made out of it?

Within two days European wheat rose from 28 to 30½ francs ($5.40 to $5.88) a centner (110 pounds), and American wheat rose from 26 to 29½ francs ($5.01 to $5.68) per centner. In a very short time the common bread (half white flour), largely used by the masses, rose from 4 to 5½ cents a pound. When the honest laborer gets 40 cents a day and he finds his loaf of bread suddenly increased in price about 25 per cent, he stops to think how it has happened; and when he learns that it is because Europe can not get American wheat at the usual price, he begins to realize what an effective and important part America is playing in his daily life.

As seen above, the amount of wheat that the United States furnishes to Switzerland is not large—not one-fifth what it should be; but, in spite of that fact, the present state of war has sent the price of bread up 25 per cent in the Alpine Republic, besides causing serious and bloody riots in Italy, helping to put a state of siege over all Spain, setting the masses of Germany grumbling, disclosing the fact that 14,000,000 Russians are in need of bread, and awakening solicitude and unrest in France—all because the United States holds, and for many decades will hold, the balance of power in breadstuffs.

JAMES T. DUBOIS,
ST. GALL, *May 14, 1898.* *Consul-General.*

BUTTER MARKET OF GREECE.*

Butter is imported into Greece from Turkey, Russia, Roumania, Austria, Germany, France, Denmark, Switzerland, and Italy, and perhaps in small quantities from other European countries.

As there is very little, if any, really good butter in the markets of Greece, there are no popular brands other than the cheap, salted butter, partly of home production. Greece is now producing what is considered a good quality of cheap butter. The best butter is usually sold in an unsalted and partially worked condition. By "partially worked," I mean that the butter has not been properly or sufficiently handled or worked after leaving the churn or separator to remove all the milk. Butter in this state is soft and liable to spoil easily. A person accustomed to the good dairy and creamery butter of the United States can not relish it.

The average wholesale price of salted butter for cooking purposes, in casks or tubs, is about 25 cents a pound. Danish butter sells at about 95 cents and Italian at $1 a kilogram (2.2046 pounds); prices, of course, varying with supply and demand.

The rate of import duty on butter for cooking purposes is 12½ cents and on butter for the table 27 cents per oke (2.84 pounds).

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*This report was made in answer to an inquiry from a New York exporting firm. Advance Sheets have been sent to inquirer.

The aggregate value of the butter imported annually into Greece is about $104,000.

The creamery butter of the United States could and would undoubtedly become a popular brand here if the price could be fixed low enough to compete for the trade. Most of the inhabitants of Greece are very poor, and but few can afford to use high-priced articles of diet. Whether the butter exporters of the United States could afford to ship butter here and sell it at a price low enough to make it popular, is more than I can answer; but, there being such a scarcity of good butter in this market, it seems to me that a good brand, with a reasonable price and proper handling, ought to sell well in Athens at least.

The butter importers of Athens are: P. Thanopoulos, S. M. Papayianrakos, G. Goulidmos, P. Clarako, and G. Pittas. Of Piræus: D. Repas, S. Anastasopoulos, and S. Papaleonardes.

DANIEL E. MCGINLEY,
Consul.

ATHENS, *April 18, 1898.*

SOUTH AFRICAN TRADE STATISTICS.

I transmit the following tables of statistics relative to Cape Colony and Natal:

Exports of colonial products from Cape Colony, 1897.

Articles.	Quantity.	Value.	
Minerals.			
Copper ore … tons	27,329		
Crocidolite … pounds	32,975		
Diamonds … carats	3,485,333		
Gold, raw * … ounces	3,139,912		
Salt, common … pounds	22,369		
Produce of cattle, etc.			
Ostrich feathers … pounds	355,196		
Hair, Angora … do	12,583,601		
Hides, ox and cow … number	624,178		
Horns … do	468,970		
Horses … do	684		
Skins:			
Goat … do	1,111,464		
Sheep … do	2,854,055		
Wool:			
Washed … pounds	4,791,924		
Scoured … do	8,566,635		
Grease … do	49,896,858		
Unenumerated		£6,752	$32,854.00
Produce of grain farming.			
Barley … pounds	10,871		
Beans and pease … do	1,592		
Bran … do	2,189,700		
Flour … do	580,864		

* All of South Africa.

Exports of colonial products from Cape Colony, 1897—Continued.

Articles.	Quantity.	Value.	
Produce of grain farming—Continued.			
Corn ... pounds...	7,473		
Oats ... do.....	903,120		
Wheat ... do.....	22,246		
Produce of wine farming.			
Argol ... pounds...	95,688		
Currants and raisins ... do.....	10,373		
Spirits (brandy) ... gallons...	14,278		
Wine ... do.....	69,117		
Dried fruit, exclusive of currants and raisins ... pounds...	4,144		
Onions ... do.....	255,143		
Potatoes ... do.....	25,640		
Tobacco ... do.....	604		
Cigars ... do.....	21		
Cigarettes ... do.....	68		
Snuff ... do.....	402		
Other kinds ... do.....	282		
Produce of sea.			
Fish ... pounds...	1,594,540		
Guano ... tons...	11		
Skins, seal ... number...	15		
Unenumerated		£1,255	$6,099.00
Produce of forest, etc.			
Aloes ... pounds...	458,895		
Buchu leaves ... do.....	91,594		
Flowers dried		11,553	56,148.00
Specimen, illustrated (natural history)		1,275	6,197.00
Wood ... cubic feet...	55,412		
Manufactured ... pounds...		4,912	23,872.00
Unenumerated		1,954	9,496.00
Sundries.			
Ale and beer ... gallons...	359		
Boots and shoes		705	3,426.00
Carts and carriages ... number...	71		
Confectionery (jams) ... pounds...	24,226		
Furniture		228	1,108.00
Leather		359	1,745.00
Machinery		200	972.00
Harness		573	2,785.00
Miscellaneous.			
Apparel and slops		96	467.00
Curiosities		1,603	7,791.00
Hardware		117	569.00
Paints		1	4.86
Ships' chandlery		40	194.00
Unenumerated		4,647	22,584.00

The total export value was £19,176,061 ($93,195,656).

Imports and exports of Cape Colony.

From and to—	Imports.		Exports.	
1896.				
United Kingdom	£12,807,332	$62,243,634	£16,404,464	$79,725,695
British possessions	811,171	3,942,291	86,636	421,051
Foreign countries	4,316,536	20,978,365	460,738	2,239,187
Total	17,935,039	87,164,290	16,951,838	82,385,953
1897.				
United Kingdom	12,839,271	62,398,857	19,019,161	92,433,122
British possessions	883,233	4,302,512	83,344	405,052
Foreign countries	4,209,374	20,457,558	333,799	1,632,263
Total	17,931,878	87,448,971	19,436,304	94,470,437

Consumption of merchandise in Cape Colony, 1897.

Articles.	Quantity.	Value.	
Agricultural implements		£94,418	$458,871
Ale and beer		113,609	562,140
Antifriction grease		7,857	38,185
Apparel and slops		857,801	4,168,913
Axles and springs for carriages		34,020	165,337
Bags, all sorts ... number	8,851,734		
Beads ... cwts	361,500		
Bicycles		227,480	1,105,553
Books and music		145,738	708,287
Boots and shoes ... dozen	352,691		
Brass and copper ... cwts	1,711		
Brass and copper wares		12,084	58,728
Brush ware		25,675	124,781
Butter and margarin ... pounds	4,505,040		
Candles ... do	4,276,846		
Cartridges ... number	13,039,694		
Cement ... pounds	69,920,051		
Cheese ... do	2,199,112		
Chicory ... do	1,331,381		
Clocks and watches		43,327	230,569
Coal and coke ... tons	84,702		
Cocoa and chocolate ... pounds	285,842		
Coffee ... do	16,599,735		
Confectionery and preserves ... do	3,935,515		
Cordage ... cwts	16,933		
Corks ... gross	330,699		
Flour ... pounds	14,679,268		
Corn ... do	63,997,825		
Oats ... do	8,043,392		
Wheat ... do	171,182,139		
Cotton, manufactured		1,125,199	5,471,467
Dates ... pounds	1,014,751		
Detonators and fuse		20,473	99,499
Drugs and chemicals		291,868	1,418,478
Dynamite ... pounds	6,181,982		
Crockery		91,071	442,605
Engravings, photographs, and pictures		11,274	54,792
Fish, preserved		84,611	411,209
Fruits:			
Dried and preserved, and nuts ... pounds	2,267,514		
Fresh		12,591	61,192
Furniture		397,407	1,931,398

Consumption of merchandise in Cape Colony, 1897—Continued.

Articles.	Quantity.	Value.	
Glass:			
Windows		£11,801	$57,353
Glassware		81,448	395,837
Gunpowder pounds	65134,9		
Guns and gun barrels		51,143	248,555
Haberdashery and millinery		1,273,008	6,186,819
Hats and caps dozen	116,273		
Hops cwts	2,743		
Iron and steel do	255,996		
Iron, corrugated do	370,518		
Jewelry and plated ware		119,322	579,905
Lamp ware		39,666	192,777
Lard pounds	962,320		
Lead (bar, pipe, sheet, and shot)		18,825	91,490
Leather pounds	756,529		
Manufactured		34,820	170,225
Linen manufactures		62,930	305,840
Machinery:			
Agricultural		54,149	263,164
Mining		1,094,109	5,317,370
Other		260,471	1,265,889
Malt		48,210	234,301
Matches gross	111,445		
Mats and mattings		7,577	36,824
Meats, cured and preserved pounds	5,435,359		
Milk, preserved do	9,393,412		
Oil:			
Lamp gallons	2,502,569		
Linseed do	149,613		
Lard do	311,551		
Other		28,104	136,585
Paints, terpentine, and varnish		66,108	321,285
Photographic material		25,095	121,962
Pipes, iron and earthen		107,530	522,596
Printers' material		38,056	186,038
Printing paper		57,593	279,902
Provisions, unenumerated		198,020	962,377
Railway material		418,022	2,031,587
Rice pounds	16,075,452		
Saccharum do	643,583		
Saddlery and harness		112,484	546,672
Salt pounds	8,702,178		
Sheep dip		57,682	279,335
Silk, manufactured		22,746	110,346
Soap pounds	12,368,789		
Spices do	484,567		
Stationery		249,791	1,233,984
Stone and slate, all kinds		21,818	95,935
Sugar, candy, sirups, molasses, etc pounds	72,216,845		
Sulphur cwts	15,621		
Tea pounds	2,489,583		
Telegraph material		21,335	103,688
Tin and zinc cwts	19,844		
Manufactured		21,744	105,676
Tobacco:			
Raw pounds	332,008		
Cigars do	279,794		
Cigarettes do	201,381		
Manufactured do	467,574		
Toys		40,966	199,095

Consumption of merchandise in Cape Colony, 1897—Continued.

Articles.	Quantity.	Value.	
Wall paper		£24,725	$120,164
Wax, paraffin, and stearin ... pounds	2,205,380		
Wheeled vehicles		60,877	294,852
Wood:			
Unmanufactured ... cubic feet	3,738,265		
Planed or grooved ... do	1,842,502		
Staves and shooks		22,975	111,659
Manufactured (not furniture)		110,662	537,817
Woolen manufactures		377,548	1,734,883
Goods by parcel post		194,980	953,603
Minor articles		628,678	3,055,373
Total value of merchandise		16,095,636	78,224,791
Value of Government articles		1,480,957	9,197,451
Specie		65,911	320,327
Grand total		17,642,504	85,647,429

Shipping of Cape Colony, 1897.

Country.	Entered.		Cleared.	
	No.	Tons.	No.	Tons.
United Kingdom	516	493,691	171	740,309
British possessions:				
India	10	15,980	43	66,657
Mauritius	18	7,842	20	12,300
Natal	179	660,025	303	1,007,806
St. Helena	1	167	2	3,899
West India Islands	1	1,713	77	50,736
Canada	5	3,639	13	14,943
New South Wales	5	12,227	62	86,304
New Zealand	2	1,056	20	78,030
Tasmania	3	2,143	12	61,203
Victoria	22	86,441	16	56,552
West Australia	6	4,923	15	22,072
Guiana	3	4,569		
Ceylon			1	2,837
Honduras			2	767
Falkland Islands			1	1,380
Queensland			1	1,063
South Australia			18	64,240
Total British possessions	255	800,725	606	1,530,789
France	8	22,519	4	9,488
Bourbon			1	2,484
French possessions			6	13,128
Germany	7	5,355	1	3,192
German West Africa	7	2,782	13	4,958
Portugese possessions:				
West Africa	2	3,413	14	37,275
East Africa			1	565
Delagoa Bay	11	23,967	26	56,052
Russia	3	1,230	1	1,201
Siam	5	4,889	2	890
Argentine Republic	28	28,423	4	6,127
Brazil	27	10,344	17	18,014
Chile	4	3,986	6	9,752

Shipping of Cape Colony, 1897—Continued.

Country.	Entered.		Cleared.	
	No.	Tons.	No.	Tons.
United States:				
Atlantic ports	71	150,375	140	181,255
Pacific ports	28	43,507	5	8,540
Pacific islands	1	314	3	2,640
Belgium	6	5,392		
Denmark	1	458		
Dutch West Indies	6	8,886		
Italy	2	1,760		
Norway	25	19,303		
Sweden	76	56,973		
Madagascar	2	5,233		
Uruguay	1	450		
Indian Islands	1	395		
Danish West Indies			2	1,416
Java			4	3,691
Guinea			1	2,565
Indian Seas			1	565
Portugal			1	295
Azores			2	1,660
Spain			4	2,722
Canary Islands			3	9,082
West Africa (native)			1	2,933
Ladrone Islands			47	55,423
China			1	1,603
Mexico			1	1,127
Total foreign countries	322	399,954	312	438,697
Not coastwise	1,093	2,694,370	1,089	2,709,795
Coastwise	1,278	3,725,831	1,278	3,723,409
Gand total	2,371	6,420,201	2,367	6,433,204

Industries of Cape Colony and Natal, 1897.

Description.	No.	Employees.	Description.	No.	Employees.
Aërated water ice works	2	63	Iron foundries and engineering works	69	571
Brickyards and potteries	67	897	Jewelry manufactures	17	77
Basket making	6	1,303	Printing, bookbinding, and die sinking	68	1,186
Breweries	5	402	Ship and boat building	14	
Bakeries	116	911	Quarries, stone	147	78
Bootmaking	101	555	Sail, tent, and tarpaulin manufacturing	9	49
Cabinetmaking	33	327	Soap and candle manufacturing	11	556
Copper mines	6	1,000	Sawmills	32	177
Coal mines	5	885	Stone and marble works	6	256
Cheese and butter factories	21	107	Tailoring	124	555
Chemical, dye, and oil works	43	903	Tobacco, cigars, and snuff manufacturing	53	556
Cooperages	14	29	Wagon, cart, and harness manufacturing	463	2,781
Distilleries	16	207			
Electric-light works	3	93			
Fruit preserving	14	378			
Flour mills	270	877			
Fish curing	81	107			
Gun-making and powder works	6	31			

The value of goods made was £5,076,453 ($24,671,561).

Cape Colony is the grain-producing section of South Africa, and I give herewith the seed sown in 1896–97 (less seven districts):

Description.	Sown.	Lost.	Harvested.
Wheat .... bushels...	228,537	1,997,679	2,054,373
Barley .... do......	64,113	509,865	753,038
Oats .... do......	575,228	929,325	778,373
Rye........ do......	35,964	512,022	253,407
Corn .... do......	55,026	828,755	702,327
Oat hay........ bundles...	....	32,450,542	115,950,705

Fruit trees and vines.

Trees.	Planted.	Standing.
Peach........	93,983	1,327,220
Apricot	30,857	259,537
Apple........	42,033	365,602
Pear	27,514	301,506
Plum........	30,023	169,974
Fig	41,621	944,802
Orange	27,675	197,824
Lemon........	2,588	21,733
Vines	5,648,496	4,833,547

The number of vine stocks destroyed during 1896–97 was 4,835,547.

Live stock in Cape Colony (less seven districts), 1896–97.

Description.	Number.	Description.	Number.
Stallions	15,887	Cows and heifers........	627,267
Mares........	97,928	Oxen........	382,317
Geldings........	87,720	Ostriches........	231,632
Mules	37,442	Pigs........	143,345
Asses........	29,840	Goats and kids........	4,054,668
Bulls........	38,099	Sheep and lambs........	10,807,895

Live stock lost in Cape Colony (less seven districts), 1896–97.

Description.	Number.	Description.	Number.
Sheep	1,191,559	Cattle........	94,348
Horses........	21,523	Ostriches........	53,812
Pigs........	6,554	Goats	356,092

Pastoral products of Cape Colony (less seven districts), 1897.

Description.	Quantity.	Description.	Quantity.
	Pounds.		*Pounds.*
Wool........	35,753,240	Butter	2,892,180
Ostrich feathers........	7,953,325	Cheese	65,364

In Cape Colony no deaths are reported from the "rinderpest," as a blockade was established by the authorities. Death of horses was from usual diseases; death of pigs, from diseases of lungs, bowels, foot, and mouth; death of cattle, from diseases of lungs, "red water," and other maladies peculiar to this country; death of ostriches, from diseases of liver, worms, and drought; death of sheep, from diseases of worms, dropsy, foot, mouth, drought, scabs, poverty, and destruction by wild animals.

Average market price of stock and animal products in Cape Colony for 1897.

Description.	Price.	Description.	Price.
Stock.		*Animal products.*	
Saddle horses .... per head...	$100.00	Wool:	
Draft horses .... do......	60.00	Washed .... per pound...	$0.16
Mules .... do......	150.00	Unwashed .... do......	.08
Asses .... do......	50.00	Butter .... do......	.35
Oxen, draft .... do......	40.00	Tallow .... do......	.14
Cows, milch .... do......	60.00	Soap .... do......	.11
Sheep .... do......	5.50	Hides .... each...	2.55
Swine .... do......	25.00	Sheepskins .... do......	.45
Goats .... do......	6.25	Goatskins .... do......	.45
Fowls .... per pair...	1.50		
Ducks .... do......	1.50		

Average market price of agricultural products in Cape Colony for 1897.

Description.	Price.	Description.	Price.
Wheat .... per bushel...	$2.32	Oats .... per bushel...	$1.59
Barley .... do......	1.34	Corn .... do......	1.64
Rye .... do......	1.63	Pease and beans .... do......	1.61

Stocks in bond in Cape Colony on December 31, 1897.

Description.	Quantity.	Description.	Quantity.
Ale and beer .... gallons...	81,945	Rice .... pounds...	1,390,072
Butter .... pounds...	484,211	Soap .... do......	785,525
Candles .... do......	616,764	Spirits:	
Cheese .... do......	72,760	Brandy .... gallons...	26,921
Chicory .... do......	279,699	Gin .... do......	8,261
Coffee .... do......	7,310,578	Liqueurs .... do......	9,683
Confectionery and preserves..... do......	382,596	Whisky .... do......	53,047
Dynamite .... do......	822,967	Sugar:	
Flour .... do......	5,281,206	Candy .... pounds...	533,131
Gunpowder .... do......	29,566	Unrefined .... do......	9,496,896
Gun barrels .... number...	3,218	Tea .... do......	1,521,227
Lard .... pounds...	96,778	Tobacco:	
Matches .... gross...	8,284	Cigars .... number...	2,743,105
Oil:		Manufactured .... pounds...	84,779
Mineral .... gallons...	711,952	Timber .... cubic feet...	3,070,158
Lard .... do......	38,497	Wheat .... pounds...	21,583,445
Pistols .... number...	285	Wine .... gallons...	23,467

Value of specie imported and exported, 1897.

Description.	Imported.	Exported.
Gold	£812	£2,191,903
Silver	64,363	31,983
Copper	736	20

Metal and coal production of Cape Colony and Natal, 1897.

Copper	tons	38,977
Gold	ounces	4,460
Coal	tons	67,456

*Statement showing particulars of vessels wrecked, foundered, stranded, or otherwise, in 1897.**

Name of vessel.	Date of casualty.	Tonnage.	Crew.	How laden.	Exact locality where casualty happened.	Description of casualty.
Thornliebank	Jan. 17	1,969	30	Coal	Table Bay	Fire.
Dora	Jan. 30	369	10	Generalcargo.	Hollams Bird Island.	Stranded.
Reistad	Jan. 31	1,330	17	Deals	Algoa Bay	Wrecked.
Aruguda	do	946	16	do	do	Collision.
Alice	Jan. —	933	15	Coal	Not stated	Coal heated.
Vilora H. Hopkins	Feb. 7	878	11	Generalcargo.	Algoa Bay	Wrecked.
Crockermouth	Feb. 18	1,297	20	Wheat	Table Bay	Windlassdamaged.
William Wilson	Feb. 19	400	12	Sugar	Algoa Bay	Leakage.
Platon	Mar. 27	450	11	Coal	60 miles south of Cape Agulhas.	Dismasted.
Port Crawford	Apr. 12	1,593	26	Grain	Table Bay	Windlassdamaged, etc.
Port Sonachen	Apr. 25	1,112	21	Rice	60 miles southwest Cape St. Francis.	Sails lost, etc.
Basuto	Apr. 26	1,764	32	Sugar	Lat. 34° 17′ S.; long. 26° 53′ W.	Steering gear damaged.
Cambusnethan	May 5	1,368	23	Ballast	5 miles west of Bird Island.	Wrecked.
Cedarbank	May 29	2,649	34	Salt	Lat. 39° 46′ S.; long. 12° 28′ W.	Dismasted.
Moland	June 6	348	9	Rice	Lat. 32° 05′ S.; long. 29° 45′ E.	Damaged.
Port Douglas	June 19	1,661	27	Coal	Half mile east of Cape Recife.	Wrecked.
Aberystwith Castle	June 20	1,103	19	Generalcargo.	1¼ miles off Cape Recife lighthouse.	Stranded.
Fredheim	June 23	440	10	Creosote	Knysna Heads	Drivenashore.
Eildenhope	do	1,498	25	Coal	Table Bay	Windlassdamaged.
British Empire	do	1,499	28	do	do	Anchors lost.
Concordia	July 3	1,002	17	Sugar	Lat. 33° 42′ S.; long. 28° 14′ E.	Leakage.
Nuckteris	Aug. 7	70	5	Lime	Buffels Bay	Wrecked.
Chelmsford	Aug. --	2,196	30	Coal	South Atlantic	Coal heated.
Helenslea	Aug. 24	1,315	21	Generalcargo.	Inaccessible Island	Wrecked.
Dumfriesshire	Sept. 16	1,262	22	Ballast	Chapman's Bay	Windlassdamaged, etc.
Cambrian Hills	Nov. 1	1,632	23	Coal	Table Bay	Fire.

*Compiled from reports furnished to collector of customs.

Statement showing particulars of vessels wrecked, foundered, stranded, etc.—Continued.

Name of vessel.	Date of causalty.	Tonnage.	Crew.	How laden.	Exact locality where casualty happened.	Description of casualty.
Ludwig	Nov. 2	299	8	Sugar	Close off Bird Island.	Sails lost, etc.
Frizt of Bryde	Nov. 3	1,038	15	Timber	Lat. 36° S.; long. 23° E.	Damaged.
Beeswing	Nov. 14	1,353	23	Coal	Table Bay	Fire.
Lilla	Nov. 28	75	5	Ballast	Port Alfred	Wrecked.
Donna Francisca	Dec. 12	2,276	29	Coal	Algoa Bay	Collision.
Gladys	do	1,345	13	General cargo.	do	Do.
Thalatta	Dec. 18	1,747	28	Coal	Table Bay	Do.
Record	do	1,721	24	do	do	Do.

These were all sailing vessels, except the *Basuto*. No lives were lost, except one on the *Fredheim* and four on the *Nuckteris*.

JAMES C. STOWE,
Consul-General.

CAPE TOWN, *April 25, 1898.*

TRADE OF KOREA IN 1897.

The year closing December 31, 1897, was more prosperous than any previous one for the foreign trade of Korea. The customs returns show that the total net trade of Korea for that year was almost double the highest figure it had previously reached, while the customs revenues increased in the like manner.

EXPLANATION OF INCREASE OF TRADE.

By reference to Table I, appended to this report, it will be seen that, despite the Japan-China war, waged largely on Korean soil, the trade of Korea increased from $3,000,000 (in round numbers) for 1893 to $5,000,000* in 1894—the year of the war—and $6,000,000 in 1895, maintaining this figure for 1896, but jumping to $11,000,000 in 1897. This increase is accounted for by the fact that during the years of the war and consequent occupation of Korean territory by Japanese troops, the latter spent large amounts of money here which furnished the Koreans a purchasing medium. Then the scarcity of rice in Japan at a time when the Korean harvests were good, together with the large influx of Chinese merchants after the war and the unprecedented expenditure of money by the Korean Government in 1897 for public works, caused a great increase in trade for last year.

IMPORTS AND EXPORTS.

The imports for 1897 were, in round numbers, $5,000,000, which were entirely covered by the exports, including the export of gold, which rose for that year to over $1,000,000, making the total exports $5,504,006 in United States currency (see Tables II, III, and IV).

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* The gold equivalent of the Japanese silver yen has been used in these figures.

COAST TRADE.

Another cause of the increase in the total trade for 1897 was the fact that regular lines of Korean steamships have been plying of late between the unopened coast ports, from which, in former years, there was a great deal of smuggling. The coast trade for 1897 amounted to $1,201,384 (see Table V).

RICE HARVEST.

The prospects of trade for 1898 are good, though the rice harvest of last summer was short, owing to the delayed rains and the unusually heavy rainfall at a time when it could only cause damage to the crops. An attempt was made last autumn to prohibit the export of rice; but as it was a project that could only work harm to the country generally and benefit to a small coterie of officials, the foreign opposition was sufficiently strong to prevent its being made. At this time (April, 1898), there is an undoubted scarcity of rice in the provinces in which this capital is located, and, as this appeals to the official class, the proposition to prohibit the export is again broached; but, as before, it can be clearly shown that there is an ample supply of rice in the country. It has, however, been bought up for purposes of speculation by the magistrates, who compel the people to sell to them for 3 or 4 yen per picul ($1.50 or $2 per 133⅓ pounds), while they get 8 yen ($4) or more for the same.

The high price of rice here at present is due to the fact that it is high everywhere, and, while the prohibition will keep the present supply at home and thus force the price down by glutting the market, the general effect on the country's commerce will be very bad, and smuggling from the nonopen ports will increase. It is now proposed to import rice, but it will be difficult to find a market when the prices are sufficiently low to admit of such a course without loss. The best rice in Seoul at present retails for about 5 cents gold per pound. Should this embargo be placed now, the returns of trade for 1898 will probably show a falling off. The export rice business of Korea is largely in the hands of the American firm Townsend & Co., which operates a large steam rice mill at Chemulpo.

The export of gold dust will probably increase this year.

IMPORTS OF COTTON GOODS.

It is difficult to ascertain from the unpublished customs returns just what portion of Korean trade belongs to each nationality. The

British representative estimates that for 1897 English manufactures amounting to about $2,000,000 in United States currency were imported into Korea; of this, $1,500,000 was for cotton goods. The import of Japanese cotton goods for the same period was about $500,000, while the import of United States piece goods amounted to not quite $25,000, our sheeting and drills having been largely replaced by Japanese-made cottons. Japanese yarns have almost entirely driven out those of English manufacture, the import of yarns from Japan for 1897 being estimated to amount to $350,000, against $36,000 for England.

While Japanese cotton goods are making such apparent strides in Korea, these goods sell best when they are manufactured from American raw cotton. For instance, the best selling Japanese yarn on the Korean market is that from the Settsu mills, which uses a very high grade of American cotton.

IMPORTS OF MATCHES.

The Japanese have a large import of matches, sending these goods, in 1897, to the amount of $73,000. Besides the direct trade between China, Japan, and Korea, the two former countries do the bulk of the Korean trade in foreign goods of other countries, which are largely imported from China and Japan and sold to the natives by the merchants of the above two countries.

GERMAN TRADE.

German trade is chiefly in aniline dyes and needles, and is estimated by the German representative to amount to $125,000 in United States gold for 1897.

UNITED STATES TRADE.

Our trade with Korea is chiefly in kerosene, machinery, flour, provisions, and household and personal articles. The import of American kerosene amounted in 1897 to $232,386. Of machinery, mostly for the use of the mines and railroads, we imported to the amount of about $100,000, and the figures for the present year will greatly exceed those for 1897. Of flour, the total import for 1897 was $24,000. As much flour was imported under the head of provisions and not separately named, the amount so imported will probably cover the import from Japan; so that I regard the above figure as roughly representing the import of American flour alone. Of provisions, household supplies, and small manufactures, the import from the United States may be roughly estimated at $25,000, with the prospect of a steady increase. I think, therefore, that the total import of goods from the United States to Korea for 1897 must have been at least $400,000 gold.

EXPORTS.

It will be seen by referring to Table IV, that rice is the heaviest item of export, amounting to nearly $3,000,000, with gold dust, beans, and ginseng next in order. The export of ginseng for this year (last year's crop) has been in excess of $600,000, the production having about doubled. In mentioning the principal articles of export and import, I have not enumerated goods that amounted to a value less than $20,000 silver.

FREIGHT SERVICE.

No American merchant ships visited Korea during 1897, and no ship entered Korean ports direct from the United States during that time. All goods for Korea are transshipped in Japanese or Chinese ports, except in the case of Russian goods from Vladivostock, which port is connected with Korea by regular lines of Russian and Japanese steamers. There are two important lines of steamships doing a regular business between Korea and the ports of China and Japan. The service leaves much to be desired. The employees are so incompetent that shipments are very irregular, and important articles are apt to be left out or overcarried, causing vexatious and expensive delays.

SHIPPING BY NATIONALITIES.

By reference to Table VIII, it will be seen that the total shipping for the five ports of Korea for 1897 amounts to 2,417 entries, with a tonnage of 601,275 tons, of which the Japanese flag covered 1,785 vessels and 462,904 tons. The Korean coast steamers come next in number of vessels, being 453, with a tonnage of only 59,491 tons, while the German flag with 42 entries had a tonnage of 40,717 tons. This latter item refers simply to two small German vessels chartered for the Korean trade. The Korean coast trade is capable of much development, but has been greatly neglected until recently. It brings to the treaty ports much of the commerce that has heretofore been carried on as a sort of open smuggling business between the non-treaty ports and Japan and China.

NEW PORTS.

Two new ports were opened last autumn, and these will further aid in promoting the legal trade. These new ports are favorably situated. Chenampo, in the north, is the port of entry for the northern capital, Peng Yang, which is the distributing center for all that region, comprising a fertile rice and wheat country on the southern side of the Ta Tong River and the rich mining districts to the north. Coal of a soft anthracite variety is found in abundance in the vicinity of Chenampo. Mokpo, the other newly opened port, is situated on the southwest coast, nearly midway between Chemulpo and Fusan. It opens up the richest agricultural region of Korea. These ports are open to foreign residence and trade. Regulations for the foreign settlements have been drawn up and ratified (see CONSULAR REPORTS No. 209, February, 1898, p. 228). Each port has already a custom-house, a Japanese consulate, a considerable population of Japanese with a few western foreigners, and Mokpo has a bank and a chamber of commerce.

BANKING FACILITIES.

The banking business in Korea is at present conducted by branches of the great banking houses of Japan, which have lately made arrangements to conduct a foreign-exchange business. Money is seldom loaned by these banks for less than 12 per cent on warehouse or other good securities. Three per cent is granted on current deposits and 6 per cent for fixed deposits of one year. The Hongkong and Shanghai Banking Corporation has a branch at Chemulpo, and the Russo-Korean Bank was opened in Seoul on March 1, 1898, but closed its doors in about one month, owing to the withdrawal of Russia from Korea for the present.

CURRENCY.

The common currency of Korea is copper cash, with a new issue of copper cent pieces, nickel 5-cent coins, and 10 and 20 cent silver pieces, based on the silver dollar, equal in value to the Japanese yen, but not coined at present. The Japanese paper and silver yen circulates freely in Korea, and Korea was practically placed upon a gold basis by the adoption of the gold standard by Japan. As the yen of Japan are redeemable in gold at the rate of 50 cents on the dollar, it was thought that it would be well to make some arrangement to provide Korea with a silver circulating medium not redeemable in gold. An arrangement was therefore entered into with Japan by which 400,000 Japanese silver yen were "chopped," or marked with the character "silver," indicating that they were not redeemable in gold. This caused much adverse criticism, as it was believed that these would at once fall to the price of bullion or of the Mexican dollar, which has caused such fluctuation in China. The Russo-Korean Bank, during its short existence, refused to receive these "chopped dollars," but the Korean customs continue to receive them. The introduction of these stamped coins may have been a mistake, but it certainly furnished Korea with a convenient circulating medium. The Korean Government is now considering the purchase of silver discs in Japan, and beginning the recoinage of the Korean dollar. Such a large profit is made on the nickel coin that private companies are endeavoring to obtain the right to coin them, and the country may soon be flooded with these coins, which will be of little value unless redeemable.

WAGES.

Business transactions in Korea are usually of a petty nature. Wages are but 30 cents silver, or 15 cents gold, for unskilled labor, and there is now much distress, owing to the high price of rice. A man and his wife with three children can live for a month on one bag of rice (140 pounds), and when rice was sold for 6 yen ($3 gold) per bag, it was possible for them to live; but with rice at 10 yen ($5) per bag, it is very difficult, and a number of people have died of starvation. In spite of this distress, there seems to be no abatement in the use of tobacco, which is constantly smoked by both sexes and all classes. The houses are so arranged that they can be heated very economically. A little straw or brushwood, used to heat the rice kettle, serves also to warm the stone floors which cover the flues from the kitchen, and thus they have a little 8-by-8 room comfortably warmed. During the sudden and severe cold snap that came on unexpectedly about the middle of December, when the thermometer went to zero, over two hundred people are said to have died in Seoul from exposure to the cold.

MANUFACTURES.

Korea manufactures nothing for foreign export. The excellent paper of the country, as well as the brass and copper utensils, the mats, blinds, fans, etc., are all made by hand in the crudest manner possible. If the people would devote themselves to the culture of silk, they would greatly improve their condition. It has been fully demonstrated that their country is especially well adapted to the culture of silk, which would furnish remunerative employment for the women and children, but they are so averse to taking up any new thing that those most interested in this laudable project had to give it up.

PROBABLE INCREASE IN RICE CULTURE.

I hear from the country that the high price of rice has induced the farmer in many regions to reclaim new land for the purpose of increasing the production of this staple. The shortsighted greed of the official class, however, will, as usual, take away the profits from the producer and cause the farmer to raise only enough for a bare subsistence. Recently, whole villages of prosperous farmers, who had been taught industry, frugality, and honesty by the American missionaries, were arrested on the false charge of holding "secret and seditious meetings" and thrown into prison. Every possession they had in the world was taken by the soldiers, runners, and magistrates, and several of the men actually died of starvation in prison. Strong effort was made to have these poor people brought to trial, that their cases might be settled one way or another, so they would be able to get in their spring crops. Nothing could be done, however, because of the reluctance of the magistrate to have his acts investigated. Another pernicious custom is the sending out of secret inspectors, presumably to investigate abuses; but, as these men have great powers and are expected to bring in large extra revenues, they squeeze every man who has anything worth taking. There are good officials, and these are honored and respected by the people, but they are few.

ANCIENT KOREAN POTTERY.

It was the Koreans who taught the Japanese the art of making the pottery for which Japan is now justly famous; but this was also a curse to the Koreans, as all the artisans, as well as the finest specimens of their work, were forcibly carried away to Japan. For five hundred years none of this fine ware has been produced; but the looting of the royal tombs caused some most excellent specimens of this rare work to be removed from the place of concealment where they had lain for six or eight hundred years, and two or three collections have recently been made in Seoul.

POSTAL SYSTEM.

Korea operates a domestic postal system, and the service gives good satisfaction. The stamps were printed in the United States. While Korea has formally entered the Postal Union, a foreign service has not yet been arranged, and the Japanese postal department still continues to serve Korea.

The stamps are of four denominations: 5 poon, equal 1 cent, green; 10 poon, equal 2 cents, blue; 25 poon, equal 5 cents, brown; 50 poon, equal 10 cents, purple. At present there are no printed covers, postal cards, or other stamped postal paper. The stamps are all alike, except in color and denomination. The characters at the top are ancient Chinese and mean Chosen (Korea) postage stamp. Those at the bottom are Korean and have the same meaning as the row at the top. The characters at the right are Korean and give the denomination, which is translated into English just below the center. Those on the left are in Chinese and mean the same as those on the right. The plum blossom ornaments each corner. This is the royal flower of the present Ye dynasty, which has been in existence for five hundred and five years. The national emblem in the center is the ancient Chinese representation of the male and female elements of nature, or the completed whole. The four characters at the corners of the centerpiece are taken from the "original alphabet of all language" and represent the four spirits that stand at the corners of the earth and support it on their shoulders. A set of these stamps costs 18 cents. They can be canceled at the post-office if desired.

AMERICAN RESIDENTS.

We have in Korea between 190 and 200 American residents, including women and children. About 30 of these are connected with the gold mines or the building of railroads, 7 are in the Korean Government employ as advisers or instructors, 3 are engaged in trade, and the remainder are chiefly missionaries.

MISSIONARIES.

The missionaries are very successful in their work and are held in high esteem by the people. They also do a great deal of good in the matter of the introduction of foreign goods and creating a demand for them. Of late, however, a very reprehensible custom has grown up among them of taking agencies for certain lines of goods, to the detriment of our merchants. Having their living assured and having no expenses, they can, of course, undersell the regular merchants. This causes much friction and brings the missionaries under the suspicion of too great interest in acquiring a money profit. I am sure the practice works to the injury of the mission cause.

RAILROADS.

The year 1897 was a memorable one for Korea, in that it saw the commencement of the first railroad to be built in the country. The concession for this road was granted to an American, James R. Morse, or his assigns, for a period of fifteen years and further periods of ten years each, in case the Korean Government should not purchase the property upon an appraisement at the end of one or other of those periods. The road is to be the American standard gauge. It is to connect this capital, Seoul, with its port, Chemulpo, 25 miles distant. A steel bridge has to be built over the Han River near Seoul; the length of this structure will be over half a mile. There will be no tunnels, though some heavy cutting has been necessary. The grading is now nearing completion. The road was started purely as a commercial undertaking, and it was thought it would be a profitable enterprise. Political complications have, however, made it a project of very great importance, and the commercial features do not now figure so largely. It is understood that upon the completion of the road by the American and Oriental Construction Company (Messrs. Collbran & James, of Chattanooga), it will be turned over to a syndicate composed largely of Japanese capitalists, but of which the concessionaire, Mr. Morse, is a member. Agents of Russian and French syndicates endeavored to purchase the road.

GOLD MINES.

The American gold-mining operations in Korea have assumed large proportions during the past year. The concessionaire, Mr. James R. Morse, having made a subconcession to another American, Mr. Leigh Hunt, this gentleman interested capital to such an extent that the work was placed upon a good footing and the prospects for the present year are said to be excellent. Ten stamps are being added to the present stamp mill; a new forty-stamp mill is now on its way to the mines, and large shipments of other mining machinery are being constantly received from America.

ELECTRIC RAILROAD AND LIGHTING.

The contractor for the construction of the Seoul–Chemulpo Railway, H. Collbran, has received a contract for the building and equipment of a street railroad for the city of Seoul. The road will employ the overhead electric trolley, and will be single track with sidings. The length, as at present arranged, will be but 6 miles; it may be extended, however. The concession for this project is in the name of a company of Koreans, who advanced 100,000 yen ($50,000) to the contractor upon signing the contract. This company also has the right to erect an electric lighting plant for the city, and the contractor's engineer is now looking into the matter.

STANDARD OIL.

The Standard Oil Company completed the erection of extensive and substantial warehouses on an island in the harbor of Chemulpo last year. It appointed our American firm, Messrs. Townsend & Co., regular agents to handle its kerosene, and the consumption of this American product will increase. The natives have largely substituted this illuminant for the old vegetable oils in the districts near the open ports, and it is finding its way well into the interior.

A vigorous attempt was made to introduce Russian oil, but it was too heavy for use in the cold weather and too smoky. It soon spoiled the white wall paper of the Korean rooms, as well as the white clothes of the people. It will probably not figure largely in the customs returns hereafter. Some Langkat oil from Sumatra was introduced in cases made in imitation of those of the American company, but the tins were poor, and the oil leaked so badly that purchasers did not care for it.

The Japanese have the pernicious habit of taking old American tins and cases, and filling them with Russian tank or Japanese oil and then selling this to the Koreans as good American oil. I have been unable to prevent this course; but the Standard Oil Company has, I believe, found a means of circumventing the would-be swindlers.

For particulars regarding the kerosene trade, see Table X.

PROPOSED FRENCH RAILWAYS.

The French are interested in railroads in Korea, and are now surveying a line to connect Seoul with the northwestern border and the Russian lines projected in Manchuria. They have a concession for this line somewhat similar to the American concession for the Seoul–Chemulpo line, which antedates the French one.

PROPOSED GERMAN MINES.

The Germans have a concession for a gold mine, similar to the concession for the American mines. German experts are now in the interior prospecting for the location.

At present, the principal financial undertakings in Korea are in the hands of Americans of high standing. The returns of trade between Korea and the United States will probably make a more creditable showing this year than they did last.

TABLE I.—*Total net trade of Korea during past five years.*

Year.	Amount.	
	Silver yen.	
1893	7,986,840	$3,993,420.00
1894	11,057,892	5,528,996.00
1895	12,884,232	6,442,116.00
1896	12,842,509	6,421,254.50
1897	23,511,350	11,755,625.00

TABLE II.—*Total net import of foreign goods, with particulars as to principal articles.*

Articles.	1896.		1897.	
Cotton goods.	*Yen.*		*Yen.*	
Gray shirtings	1,567,967	$783,983.50	2,121,671	$1,060,835.50
Drills, American and English	47,998	23,999.00	103,646	51,823.00
Lawns and muslin	165,925	82,962.50	185,332	92,666.00
Liner	89,331	44,665.50	118,458	59,229,00
Sheetings:				
American and English	58,455	29,227.50	252,697	126,348.50
Japanese	115,914	57,957.00	246,454	123,227.00
Lastings	65,919	32,959.50	44,136	22,068.00
Unclassed Japanese cotton goods	644,671	322,335.50	908,592	454,296.00
Cotton yarn:				
English and Indian	71,386	35,693.00	73,069	36,534.50
Japanese	368,064	184,032.00	692,278	346,139.00
All other	142,915	71,967.50	318,593	159,296.50
Total cotton goods	3,338,545	1,669,772.50	5,064,926	2,532,463.00
Woolen goods.				
Mostly blankets and lastings	36,742	18,371.00	60,714	30,357.00
Metals.				
Copper, pigs and slabs	54,497	27,248.50	106,535	53,267.50
Bar and rod iron	29,671	14,835.50	52,186	26,093.00
Nails	12,228	6,114.00	22,018	11,009.00
Old iron	16,710	8,355.00	38,817	19,408.50
Tin, in slabs	43,063	21,531.50	71,073	35,536.50
Hardware	85,375	42,687.50	146,524	73,262.00
All other	57,611	28,805.50	119,872	59,435.50
Total metals	299,155	149,577.50	556,025	278,012.50
Sundries.				
Bags and ropes for packing	156,822	78,411.00	336,495	168,247.50
Clothing	97,107	48,553.50	99,025	48,512.50
Coal and coke	55,262	27,631.00	98,073	49,036.50
Cotton wadding	132,603	116,301.50	186,566	93,283.00
Dyes (chiefly aniline)	73,450	36,725.00	89,110	44,555.00
Flour, probably American	43,295	21,647.00	48,426	24,213.00
Grass cloth	267,769	133,884.50	432,690	216,345.00
Beer, wine, and spirits	47,530	23,765.00	55,073	27,536.50
Matches, mostly Japanese	105,043	52,521.50	146,329	73,164.50
Medicines	36,644	18,322.00	54,029	27,014.50
Needles	12,195	6,097.50	21,580	10,790.00
Kerosene:				
American	330,008	165,004.00	464,772	232,386.00
Japanese	1,675	837.50	8,620	4,310.00
Russian	63,634	36,817.00	34,033	17,016.50
Other kinds	27,840	13,920.00	59,721	29,860.50
Porcelain	34,144	17,072.00	57,224	28,612.00
Table provisions	92,622	46,311.00	132,843	66,421.50
Railway material, American	....	....	155,283	77,641.50
Rice	....	....	23,413	11,706.50
Japanese saké	69,149	34,574.50	90,890	45,455.00
Salt	101,176	50,588.00	272,385	136,192.50
Silk piece goods	375,921	187,960.50	548,445	274,222.50
Sugar	41,692	20,846.00	68,152	34,076.00
Timber	73,925	36,962.50	84,894	42,497.00
Tobacco, cigars, cigarettes	57,112	28,556.00	89,209	44,604.50
Umbrellas	11,924	5,962.00	21,266	10,633.00
Unenumerated	430,785	215,392.50	698,251	349,125.50
Total sundries	2,849,426	1,424,713.00	4,374,917	2,187,458.50
Grand total	6,531,324	3,265,662.00	10,067,514	5,033,757.00

TABLE III.—*Total exports from Korea.*

Year.	Amount.	
	Yen.	
1895	2,481,808	$1,240,904.00
1896	4,278,700	2,139,350.00
1897	8,973,895	4,486,947.50

TABLE IV.—*Returns of principal articles of export from Korea in 1897.*

Articles.	Amount.	
	Yen.	
Beans	1,710,121	$855,010.50
Fish	330,212	165,106.00
Ginseng	632,441	316,220.50
Rice	5,556,760	2,778,380.00
Seaweed	82,655	41,327.50
Skins	24,988	12,494.00
Wheat	190,475	95,237.50

TABLE V.—*Coast trade for the five open ports.*

Year.	Amount.	
Imports.	*Yen.*	
1896	805,255	$402,627.50
1897	1,206,493	603,246.50
Exports.		
1896	768,924	384,462.00
1897	1,196,286	598,143.00
Total coast trade for 1897	2,402,779	1,201,389.50

TABLE VI.—*Gold export to China and Japan.*

Year.	Amount.	
	Yen.	
1896	1,390,412	$695,206.00
1897	2,034,079	1,017,039.50

TABLE VII.—*Movement of treasure to and from Korea in 1897.*

Description.	Gold.	Silver.	Copper.	Total.	
	Yen.	*Yen.*	*Yen.*	*Yen.*	
Import	5,520	3,290,772	269,886	3,566,178	$1,783,089
Export	2,034,079	1,858,885	232,864	4,125,828	2,062,914

TABLE VIII.—*Total shipping for the five ports of Korea for 1897.*

Flag.	Sail.		Steam.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
British			14	13,794	14	13,794
Chinese	99	937			99	937
German			42	40,717	42	40,717
Japanese	1,264	46,910	521	415,994	1,785	462,904
Russian			24	23,432	24	23,432
Korean	239	6,882	214	52,609	453	59,491
Total					2,417	601,275

TABLE IX.—*Customs revenues.*

Year.	Amount.	
	Yen.	
1894	481,006	$240,503.00
1895	741,297	320,648.50
1896	691,782	345,891.00
1897	1,113,169	556,084.50

TABLE X.—*Trade in kerosene oil.*

Description.	1896.			1897.		
	Quantity.	Value.		Quantity.	Value.	
	Gallons.	*Yen.*		*Gallons.*	*Yen.*	
American	1,349,740	330,008	$165,004.00	2,010,820	464,772	$232,386.00
Russian	264,530	63,634	31,817.00	158,300	34,033	17,016.50
Japanese	6,500	1,675	837.50	42,480	8,620	4,310.00
Sumatran				103,230	23,343	11,671.50
Other kinds*					36,378	18,189.00
Total	1,620,770	395,317	197,658.50	2,314,830	567,146	283,573.00

* This item probably refers to vegetable illuminating oils.

HORACE N. ALLEN,
Consul-General.

SEOUL, *April 18, 1898.*

UNITED STATES TRADE IN NORTH CHINA.

The following is an extract from the annual report on the trade of China for the calendar year 1897, by Mr. Taylor, statistical secretary of customs, Shanghai:

The uneasiness caused by the startling political events in the north, combined with a scarcity of silver, partly due to the withdrawal of Japanese yen and to the uncertainty of the course of exchange, practically put a stop to all import business during the autumn and winter months. Notwithstanding these drawbacks, the value of imports was 238,631 haikwan taels higher than in 1896, and, as the value of exports showed an increase of over 32,000,000 taels, the total value of the foreign trade during 1897, aggregating 366,329,983 haikwan taels ($270,817,857).* resulted in an excess of 32,658,568 haikwan taels over the figures for any preceding year—a most satisfactory proof of the sound basis upon which the foreign commerce of China rests and a striking evidence of the expansion which will follow improved means of communication.

Probably the most noticeable feature in the trade is the continued advance made by Japan, and it may be useful to call attention to the report of the acting commissioner at Shasi, who notes the exhibition there, at the Japanese consulate, of samples of Japanese goods. Whether the adoption by Japan of a gold standard will assist this growing trade may be open to question, but the rapid strides which have marked the year under review are significant when viewed in connection with the difficulties the depreciation of silver has placed in the way of imports from western nations.

The net value of the import trade was 202,828,625 haikwan taels ($149,890,353).

The trade in cotton piece goods shows, as was expected, a falling off from the figures for 1896. American goods, however, continue to increase in favor. Drills show an improvement of over 300,000 pieces, jeans of over 15,000 pieces, and sheetings of nearly 170,000 pieces; but these are almost the only exceptions to the general decline. Shirtings of all kinds, except plain dyed, fell off. Drills, except American, show a heavy decrease, while jeans improved. Of sheetings, except American, less were imported by over 500,000 pieces. On the whole, the year, owing to the fall in exchange and the heavy stocks carried over from 1896, was one of the worst on record for the piece-goods trade.

The favor which American goods find in the Chinese market is due to their cheapness, freights from America being lower than from Europe. The importation of inferior qualities of plain goods seems likely to cease, the products of Chinese mills gradually taking their place. Even before the erection of local cotton mills, an increasing importation of cotton yarn had shown that the people prefer a home-made article in the commoner grades, and of late years importations have contained a large proportion of finer goods. This tendency is likely to become more marked in the future, and in connection with this subject it is interesting to note that, while the importation of English and Indian cotton yarn fell off in 1897, that of Japanese yarn more than doubled.

All kinds of woolen piece goods, except lastings, show a decrease, while miscellaneous piece goods slightly improved.

With a decline in piece goods and metals, we have to look for increases in sundries to explain the satisfactory total of foreign imports, and we are at once struck by the astonishing progress made in the importation of kerosene oil, the total increase for all kinds amounting to over 32,000,000 gallons. American oil is finding vigorous rivals in Russian and especially Sumatran oils. To go back three years for purposes of comparison: In 1894 the figures were—American, 51,670,853 gallons; Russian, 17,500,283 gallons; Sumatran, 534,280 gallons; while in 1897 they were—American, 48,212,505 gallons; Russian, 36,924,125 gallons; and Sumatran, 14,212,278 gallons. The importation of raw cotton, a significant item, jumped from 99,129 piculs (13,217,200 pounds) in 1896 to 160,256 piculs (20,707,466 pounds); and, while European matches fell to about half the figure for the preceding year, Japanese matches rose from 7,793,000 to 8,974,000 gross. The diminution in the import of rice was due to splendid harvests. Sugars of all kinds show increases, which are also specially noticeable in the case of brass buttons, window glass, and umbrellas.

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* Taking the average value of the haikwan tael in 1897, as estimated by the United States Director of the Mint, at 73.9 cents. The average for 1896 was 81.1 cents.

Increased trade was naturally accompanied by a proportionate demand for more tonnage, and the entries from foreign ports were 5,281 vessels aggregating 4,799,000 tons, as against 4,722 vessels aggregating 4,793,000 tons during 1896, while the coastwise entries were 16,639 vessels, making 12,036,000 tons, as against 15,253 vessels in 1896, representing 11,930,000 tons. Sailing vessels entered and cleared were 891, or 100,000 tons, in excess of the previous year. The total tonnage, inwards and outwards, was 33,732,362 tons; and of this total the percentages contributed by the different flags may be stated, in round figures, as: British, 65 per cent; Chinese, 23 per cent; German, 5 per cent; Japanese, 2 per cent; Swedish and Norwegian, 2 per cent; French, 1 per cent; American, 1 per cent; and all other flags together, 1 per cent.

Mr. Taylor is a British subject and tries to put a good face on the decline of English goods. The truth is that the excellent qualities of American cottons and not their cheapness has won them such enormous sales.

From the abstract of statistics for 1897, I have compiled the following as of interest to the United States:

Value of the foreign trade and customs revenue of China.

Year.	Foreign trade.	Customs revenue.
	Haikwan taels.	*Haikwan taels.*
1885	153,205,729	14,472,766
1897	366,329,983	22,742,104

Value of trade by countries in 1897.

Country.	Imports.		Exports.		Total.	
	Hk. taels.		*Hk. taels.*		*Hk. taels.*	
Great Britain	40,015,587	$29,571,519	12,945,229	$9,566,524	52,960,816	$39,138,043
United States*	12,440,302	9,193,383	17,828,406	13,875,192	30,268,708	22,358,574
Continent of Europe (Russia excepted)	8,565,807	6,330,131	25,878,118	19,123,929	34,443,925	25,454,061
Japan (excluding Formosia)	17,564,284	12,980,006	15,832,034	11,719,873	33,396,318	24,679,879
All the Russias	3,442,449	2,542,971	16,410,439	12,127,314	19,852,888	14,671,284
Hongkong	90,125,887	66,603,030	60,402,223	44,637,243	150,528,109	111,240,273
All the rest of the world	35,120,678	26,954,181	13,410,206	9,920,142	48,530,884	35,864,323

* United States Treasury figures are: Imports from China, $20,403,862; exports to China, $11,924,433; imports from Hongkong, $923,842; exports to Hongkong, $6,060,039.

Comparing these figures with those for 1890, it will be seen that, while Great Britain has not quite doubled, the United States has trebled, her exports to China in the last eight years; that Great Britain's purchases have decreased, while those of the United States have more than doubled; that the value of United States exports to China is greater than those of all the continent of Europe (excepting Russia), and greater than those of all Russia, European and Asiatic. The United States bought more of China than either Great Britain, Japan, or all the Russias, and more than the combined purchases of India, Singapore and Straits, Australia, New Zealand, etc.; South Africa, including Mauritius; British America, South America, Macao, Philippine Islands, Cochin China, Annam and Tonkin, Siam, Java, Sumatra, Turkey in Asia, Persia, Egypt, Algiers, Aden, etc. (these divisions I have set in the above table as "all the rest of the world"); and, could we get the statistics of our trade passing through Hongkong, I think we would be able to show that we sold at least 10,000,000 taels more than the customs tables account for. It is also known that a very considerable part of the imports from England—at least to the value of 8,000,000 taels—are really United States goods, shipped via London, and more or less merchandise is sent via British America. I firmly believe that our trade sales to China last year amounted to nearly 30,000,000 taels ($22,170,000).

Table showing the imports of all merchandise which expressly names the country of its origin for the twelve months ended December 31, 1897, and for the same period of 1896.

Description.	1896.	1897.	Decrease.	Increase.
Drills:				
English ... pieces	132,373	76,202	56,171	...
Indian ... do.	39,775	11,243	28,532	...
Dutch ... do.	84,334	25,862	58,472	...
Japanese ... do.	9,136	1,250	7,886	...
American ... do.	1,226,759	1,531,647	...	304,888
Jeans:				
English ... do.	127,728	183,451	...	55,723
Dutch ... do.	54,260	50,890	3,370	...
American ... do.	52,480	68,076	...	15,596
Sheetings:				
English ... do.	1,019,991	389,569	630,422	...
Indian ... do.	156,709	23,700	127,009	...
Dutch ... do.	1,040	...	1,040	...
Japanese ... do.	25,037	24,744	793	...
American ... do.	2,251,600	2,418,971	...	167,371
Oil, kerosene:				
Sumatran ... gallons	5,151,873	14,212,278	...	9,212,278
Russian ... do.	28,285,000	36,924,125	...	8,639,125
American ... do.	33,520,649	48,212,505	...	14,691,856

Only one instance of gain in the imports of fabrics other than American is shown—English jeans—while in this as in all other classes we show an immense increase.

The figures for oil are far from satisfactory, as the increase for Russian and Sumatran is relatively larger than for American.

Vessels entered and cleared in 1897.

Flag.	1892.		1897.		Decrease.		Increase.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
British	18,973	19,316,815	21,140	21,891,043	...	...	2,167	2,574,228
Chinese *	8,246	6,308,523	12,706	7,543,529	...	...	4,460	1,235,006
German	2,016	1,466,133	1,858	1,658,094	158	...	...	191,961
Sweden and Norway	260	139,255	729	619,742	...	...	460	480,487
Japanese	719	630,868	653	660,707	66	...	...	29,839
French	144	252,920	464	423,122	...	...	320	170,202
American	111	61,328	333	269,780	...	...	222	208,452
Danish	380	164,781	276	142,932	104	21,849	...	...
Russian	84	111,570	70	145,660	14	...	...	34,090
Austrian	610	639,744	32	68,484	578	571,260	...	...
Dutch	70	77,659	20	16,440	50	66,219	...	...
Hawaiian	...	...	14	31,128	...	...	14	31,128
Portuguese	...	...	12	466	...	...	12	466
Siam	...	...	2	1,314	...	...	2	1,314
Korean	...	...	2	888	...	...	2	888
Spanish	28	18,312	...	...	28	18,312	...	...

* The Chinese ships are practically all owned by one company.

In 1892, American ships stood No. 10 and in tonnage No 11 on the list; in 1897, American ships and tonnage stood No. 7, having gained 222 ships and 208,452 tons.

In the matter of increased numbers of ships, we stood fifth, and in tonnage fourth. China shows the greatest gain in ships and Great Britain in tonnage. Germany, Japan, and Russia lost in number of ships, but gained in tonnage. Austria shows the greatest loss—578 ships of 571,260 tons—while Spain has disappeared from the list.

With reference to the annual revenue, the principal treaty ports stood in the following order:

In 1890.	*In 1897.*
1. Shanghai.	1. Shanghai.
2. Canton.	2. Hankau.
3. Hankau.	3. Canton.
4. Fuchau.	4. Fuchau.
5. Swatow.	5. Swatow.
6. Ningpo.	6. Tientsin.
7. Kinkiang.	7. Kinkiang.
8. Amoy.	8. Amoy.
9. Chinkiang.	9. Ningpo.
10. Tientsin.	10. Chinkiang.
11. Tamsui.	11. Niuchwang.
12. Wuhu.	12. Chefoo.
13. Niuchwang.	13. Ichang.
14. Tainan.	14. Wuhu.
15. Chefoo.	15. Hangchow.
16. Ichang.	16. Chungking.
17. Wenchow.	17. Soochow.

The three northern ports of Tientsin, Niuchwang, and Chefoo, in the region now covered by the claims of foreign powers, have advanced: Tientsin from 10 to 6; Niuchwang, 13 to 11; and Chefoo, from 15 to 12. The following ports show a decrease in the revenue collected in 1897 from that collected in 1896: Kinkiang, Wuhu, Chinkiang, Shanghai, Ningpo, Fuchau, Amoy—all ports south of this place—while the three northern ports (Tientsin, Niuchwang, and Chefoo) all show gains. In the total value of the trade for each port, the following show a decrease from 1896: Ichang, Wuhu, Ningpo, Fuchau, and Amoy. In the value of foreign imports, the following show a loss from 1896: Ichang, Wuhu, Shanghai, Ningpo, and Fuchau.

Of the net increase of foreign trade in China in 1897 over that for 1896, almost all is to be credited to the three northern ports, and over one-third of it to the single port of Chefoo (excluding, according to the customs method, the extreme southern ports of Lappa, on the Macao frontier; Kowloon, adjacent to Hongkong; and the three ports on the French Tonkin frontier—Szmao, Lungchow, and Mêngtze—their trade being mostly in opium).

The net value of foreign imports increased by 3,077,504 haikwan taels ($2,274,275) in 1897 over that for 1896. In trying to see to what this increase is due, I find that the value of certain lines of American merchandise was as follows:

Articles.	1896.	1897.	Increase.
	Hk. taels.	*Hk. taels.*	*Hk. taels.*
Drills	3,531,320	4,469,992	938,672
Jeans	118,104	157,419	39,315
Sheetings	6,667,357	6,800,141	132,784
Kerosene oil	4,833,573	6,935,155	2,101,582
Total	15,150,354	18,362,707	3,212,353

Thus, on the four classes of merchandise which are expressly termed "American" in the returns, there was a gain in value of 3,212,353 haikwan taels ($2,373,929) or 134,849 haikwan taels ($99,653) more than the entire gain for all foreign imports.

Unfortunately, the abstract now under review does not give the details of trade for the various ports. We shall have to wait for the annual report, which generally appears in June or July; but, by taking the report issued quarterly, I find the following merchandise expressly classified as American imported into the three northern ports of China in the years 1896 and 1897:

Articles.	1896.	1897.	Increase.
Niuchwang.			
Drills ....pieces...	248,428	349,280	100,852
Sheetings ....do......	376,105	566,167	190,062
Kerosene oil ....gallons...	523,500	2,046,000	1,523,000
Tientsin.			
Drills ....pieces...	447,193	553,155	105,962
Jeans ....do......	41,955	58,060	16,105
Sheetings ....do......	1,085,977	1,260,308	174,331
Kerosene oil ....gallons...	2,743,200	4,560,500	1,817,300
Chefoo.			
Drills ....pieces...	106,326	163,030	56,704
Jeans ....do......	340	1,100	760
Sheetings ....do......	217,560	436,961	219,401
Kerosene oil ....gallons...	2,388,250	5,280,060	2,891,810
Total.			
Drills ....pieces...	801,947	1,065,465	263,518
Jeans ....do......	42,295	59,160	16,865
Sheetings ....do......	1,679,642	2,263,436	583,794
Kerosene oil ....gallons...	5,654,950	11,886,560	6,231,610

The following table shows the proportion of the above-named American merchandise received at the three northern ports, as against the total net importations for the whole Empire during the calendar year 1897:

Description.	Drills.	Jeans.	Sheetings.	Kerosene oil.
	Pieces.	*Pieces.*	*Pieces.*	*Gallons.*
Total (net) importations for all China............	1,531,647	68,076	2,418,971	48,212,505
Amount imported into Tientsin, Niuchwang, and Chefoo............	1,065,465	59,160	2,263,436	11,886,560
Balance taken by all the rest of China............	466,182	8,916	155,535	36,325,945

This table tells the whole story.

The value of the total importations of the above-named merchandise is given as follows:

Articles.	Value.	
	Hk. taels.	
Drills	4,469,992	$3,303,324
Jeans............	157,419	116,333
Sheetings	6,800,141	5,025,373
Kerosene oil	6,935,155	5,125,080
Total............	18,362,707	13,570,040

These values are taken from the official report. In the table of value of trade by countries the imports from the United States were estimated at 12,440,302 haikwan taels ($9,193,383), while the four classes of American merchandise above total 5,922,405 haikwan taels

($4,376,657) more, thus supporting my contention that our trade is nearer 30,000,000 than 12,000,000 haikwan taels; for there is all the flour, valued at 1,221,516 haikwan taels ($902,700); morphia (which all comes from the United States), valued at 136,339 haikwan taels ($101,954); ginseng, valued at over 1,000,000 haikwan taels ($739,000); machinery, locomotives, household goods—in fact, none of our exports are included in this total excepting those named above.

The total value of the articles expressly classed as American imported into all China in 1897 being 18,362,707 haikwan taels ($13,570,040), it is interesting to know what was the value of our trade in the northern ports. At this time this can be obtained only approximately; but perhaps it will serve to show what our interests are worth.

Table showing the proportion of the value of the above-named American merchandise received at the three northern ports, as against the total value of the same for the whole Empire for calendar year 1897.

Description.	Total (net) value for all China.		Value taken by Tientsin, Niuchwang, and Chefoo.		Balance taken by all the rest of China.	
	Hk. taels.		*Hk. taels.*		*Hk. taels.*	
Drills	4,469,992	$3,303,324	3,108,346	$2,297,068	1,361,646	$1,006 256
Jeans	157,419	116,333	137,068	101,293	20,351	15,039
Sheetings	6,800,141	5,025,304	6,370,153	4,707,543	429,988	317,761
Kerosene oil	6,935,155	5,125,080	1,697,777	1,254,657	5,237,378	3,870,422

RÉSUMÉ.

	Hk. taels.	
Total value of the above named merchandise	18,362,707=	$13,570,040
Value taken by Niuchwang, Tientsin, and Chefoo	11,313,344=	8,360,561
Balance taken by all the rest of the Empire	7,049,363=	5,217,479

Therefore, reduced to United States gold, the value of the above-named merchandise was 18,362,707 haikwan taels ($13,570,040). Of this amount, 11,313,344 haikwan taels ($8,360,561) was taken by the three northern ports of Niuchwang, Tientsin, and Chefoo—almost two-thirds of the entire value of the above-named merchandise that was sold to all China. While this result is obtained by careful calculation and can be relied on as accurate, it does not show the true value of our trade; there were imported at least twelve Baldwin locomotives; two or three ships entered Tientsin with American lumber; over 100 bicycles, rails, machinery of all kinds, flour, canned goods, clocks, watches, etc., were imported in large quantities from the United States into these three ports; and could we add the value of these items to those of which we have a record, it would be found that our interests in North China are second to none.

In the Exporters' and Importers' Journal, New York, February 26, is a list of exports to China from that port for the four weeks ending February 9, 1898. I attach it, as it will give some idea of the wide character of our trade:

Articles.	Quantity.	Articles.	Quantity.
Ammonia … drums	10	Manufactured tobacco … pounds	5,584
Beer … cases	25	Miscellaneous goods … packages	84
Do … barrels	25	Manufactures of wood … do	19
Blacking … packages	6	Nails … kegs	2,220
Bicycles … cases	23	Oars	342
Baking powder … packages	4	Oakum … bales	100
Bottles … do	3	Oilcloth … cases	31
Books … cases	8	Playing cards … do	2
Clocks … do	1	Phonographs … do	1
Do … packages	116	Petroleum … gallons	4,851,320
Carpet sweepers … case	1	Perfumery … boxes	3,000
Cotton seed … bags	63	Photographs … case	1
Cigarettes … cases	212	Pig iron … tons	400
Canned meat … do	90	Perfumery … cases	5
Carriage material … packages	9	Pantasote … do	1
Drugs … do	113	Printed matter … do	2
Duck … bales	27	Refrigerators … packages	40
Domestics … do	5,515	Refining machinery … do	6
Drug sundries … packages	2	Slates … cases	6
Electric silicon … cases	2	Stationery … do	6
Essences … do	1	Scales … do	9
Electric material … do	4	Soap … do	5
Glassware … do	1	Shoes … do	1
Hardware … do	76	Slate mantels … packages	14
Iron pipe … packages	150	Sewing machines … cases	26
Iron goods … cases	2	Twine … bale	1
Iron safe	1	Tobacco … hogshead	1
Lubricating oil … gallons	59,691	Typewriters … cases	1
Lamp goods … packages	56	Tacks … do	4
Metal-work machinery … cases	22	Varnish … gallons	5
Matting … rolls	38	Wax … pounds	4,982
Manufactures of iron … packages	2	Wick … case	1

In the same journal is a table compiled from the reports of the Bureau of Statistics, Treasury Department, in which it is stated that our exports to China during the year 1897 were valued at $17,978,065 gold. If we reduce that amount to the haikwan, or customs, tael, at the rate by which the Chinese customs has reduced our money (72 cents=1 haikwan tael), we will find that it would represent 24,830,645.84 haikwan taels; again confirming my statement that the customs returns do not give us justice. As I have shown that the value of the imports of American drills, sheetings, jeans, and kerosene oil amounted to $13,570,040 in United States gold, and the Bureau of Statistics states that our exports were valued at $17,978,065 gold,* we have left only $4,408,025 gold with which to pay for all other exports. The article states that there were exported to China locomotive engines valued at $138,140, miscellaneous machinery valued at $80,553, flour valued at $3,322,241; total value of these specified classes, $3,540,934 gold; leaving only $848,728 with which to pay for all the other unenumerated exports.

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* The "injustice" charged against the Chinese customs is wholly due to confusing Hongkong with Chinese trade. The Chinese customs, as is the case with the customs of nearly all other countries, credit imports to the countries from which they are received; not to the countries of origin. The figures quoted by the consul as covering the value of our exports to China include also our exports to Hongkong, while the American products entered through the Chinese customs from Hongkong are entered as imports from Hongkong. The figures for our exports to China and Hongkong are given elsewhere. See foot note, p. 577.

In the foregoing report, I believe that I have demonstrated without fear of successful contradiction that the treaty ports of Niuchwang, Tientsin, and Chefoo are of paramount importance to the United States, forming a market which buys at least two-thirds of the total exports to China. What effect will the occupation of Port Arthur and Kyao-chau have upon this trade?

As to Russia, the port of Niuchwang will be dominated by Talienwan, and we know what Vladivostock is, and Batum. We also know that Russian oil is our greatest rival in the East, and that only Russian ships can trade at Russian ports. The route to Niuchwang and Tientsin being in the control of Russia, it is but reasonable to presume that Russian interests will predominate. On the other side of the gulf is this port of Chefoo; 40 miles to the east is the greatly coveted stronghold of Weihaiwei, and to the south is Kyao-chau. Germany, it is stated, claims the commercial sovereignty of this province, and as Kyao-chau is the most accessible port, we can see the effect of her sway over Shantung.

JOHN FOWLER,
CHEFOO, *April 20, 1898.* *Consul.*

RAILWAY ENTERPRISES IN CHINA.

I inclose translation of a memorial of the Tsung-li Yamên to the Throne, conveying the petition of Dr. Yungwing for permission to construct a railroad from Tientsin to Shanghai, through the whole length of this province. The petition was granted by the Emperor, when, it is stated, the German minister protested, claiming that his Government had the sole right to all commercial enterprises in Shantung. The result was that the permission was withdrawn. For the Chinese view, I inclose translation of an article taken from the Hupao of March 16, 1898, the journal patronized by the official classes of China. Dr. Yungwing has had a long and honorable career in New England. I have no personal knowledge of the matter, but it is understood that he represents an American syndicate.

JOHN FOWLER,
CHEFOO, *April 11, 1898.* *Consul.*

A FURTHER MEMORIAL BY THE TSUNG-LI YAMÊN WITH REFERENCE TO THE APPLICATION OF YUNGWING, TAOTAI, FOR THE CONSTRUCTION OF A RAILWAY FROM TIENTSIN TO CHINKIANG FOR THE PROMOTION OF COMMERCE.

On the 26th day, twelfth moon, twenty-third year, Yungwing, expectant taotai of Kiangsu, petitioned:

"A line north and south from Tientsin through Têhchow, in Shantung, to Chinkiang, Kiangsu, is necessary, and should be built in the interest and for the welfare of the people.

"At present, Germans taking advantage of the missionary case desire to lay down rails to Chinan, and I propose that we first construct this northern-southern line, so that the Germans building to Chinan can be asked to join their line with ours, thus restricting them in their operations. It is of the utmost importance that the construction of a railroad from Tientsin to Chinkiang should be undertaken by us, as otherwise the benefits will be derived by others. This matter should no longer be delayed, and capital should be raised from wealthy merchants and prosperous business men for the carrying out of the project. I humbly beg that the above be brought to the attention of the Throne, and that permission be granted in the same terms of an edict issued in the tenth moon of the twenty-first year: 'Let the said taotai establish offices, and undertake to raise sufficient funds at an early date.'

"I forward herewith draft of twenty-two rules."

With reference to the above, the ministers have to observe that in time of peace the railway will promote commerce and in times of difficulty facilitate the moving of troops. Western nations all have railways spread over their respective countries like a spider's web.

The Chinese Lee-Han line, under the management of His Excellency Shên, has already been surveyed, and arrangements for the construction nearly completed. Yungwing, in carrying out his scheme, could cooperate with Shên as regards connecting the branches of the two main lines. Moreover, this increase of railway enterprise will serve to maintain the integrity of the Empire.

The twenty-two rules submitted appear to be satisfactory, but the clause relating to the allotment of shares to foreigners should be amended so as to have it distinctly understood that foreign capital should be allowed only as a loan, to be returned by the Chinese merchants concerned, and thus accord with the terms of a former memorial.

Should permission be granted by the Throne, we will instruct the said taotai to establish public offices, and make satisfactory arrangements for the carrying out of the scheme, and after a survey to report to us, as well as to the high provincial authorities through whose territory the railway is intended to pass. Permission will be granted if the route appears practicable.

Rescript in vermilion

24, 1, 21. Granted.

[Copy and translation from Hupao, March 16, 1898.]

Our Tientsin correspondent states:

It will be remembered that some time ago Yung taotai petitioned the Tsung-li Yamên for permission to undertake the raising of capital and the construction of a railroad from Chinkiang to Tientsin, and that this subsequently received the imperial sanction.

Yung taotai formerly resided in America, where he became acquainted with men of letters, as well as of means, and it was his intention to raise the necessary funds by a loan from American merchants and officials. He also intended to procure the railway employees and material from the United States.

It is reported, however, that the German minister, on hearing of this, addressed a note to the Tsung-li Yamên, to the effect that he understood they had consented to the construction of a line from Tientsin to Chinkiang, which would have to pass through Shantung, and maintained that as Kyao-chau, in that province, had been leased to Germany, she should have the privilege of supplying the material and workmen, which would at the same time accord with the treaty.

The Tsung-li Yamên did not see their way clear to refuse, so Yung taotai, in the construction of his line, will make a detour around Kyao-chau [Shantung ?].

[Extract from the China Gazette, March 9.]

We stated in our issue of the 24th of February that a taotai named Yung had memorialized the Throne for permission to construct a railway through Chihli and Kiangsu, to which several governors, viceroys, and other high Chinese officials for various reasons objected. It was first proposed that the railway should run from Tientsin to Chinkiang, touching Shantung at one or two points along its route. The native press now reports that the German minister in Pekin also protested against the enterprise, alleging that the German rights to railway construction in Shantung were involved. Taotai Yung proposed that he should obtain the aid of American capitalists and engineers to carry out the undertaking, and the German minister says that Germany has obtained the sole right to invest capital and supply engineers for railway construction in every part of the province of Shantung, on which grounds he strenuously opposed the scheme proposed by Taotai Yung. The latter, therefore, altered his scheme so far as to provide that the proposed railway should not clash with the interests of the line which the Germans say they are going to build from Kyao-chau to Ichow, with which alteration the German minister professed himself satisfied.

GERMAN RAILWAY ROUTE.

Under date of April 13, 1898, Consul Fowler sends a newspaper clipping giving the description of the probable route of the railway from Kyao-chau to Chinan-fu.* Besides this route, adds the consul, the Germans have obtained the right to construct a railroad to Ichow-fu, and thence to Shanghai. The clipping reads:

After rounding the north end of the bay, there are two advantageous routes to Weihsien. One via Kyao-chau and Kaomi cities, across the Kaomi wa (an ancient lake, once drained, but still subject to floods in the rainy season) and, by a slight southerly detour, via the coal deposits, 12 miles south of the city. The other route follows the cart road, passing north of Kyao-chau and Kaomi cities, bridging the Hwaiho below its confluence with the Yunho, and thence west 15 miles to Weihsien. Both routes are nearly the same in distance. The southerly one has the advantage of tapping the trade of two cities and the coal mines, while the northerly route traverses a district less threatened by floods and avoids an extra bridge by crossing below the confluence of two rivers. Whatever route be selected, Weihsien City is bound to be the first important point. The geographical location of this city makes it very important as a distributing center for central Shantung. Eleven arteries of trade converge here, giving the place a wide reputation for wholesale business. By the primitive means now at command, large quantities of foreign goods, such as cloth, yarn, iron, and kerosene, are transported from Chefoo, as well as still larger consignments of native goods from southern markets. All this commerce is coastwise, and hence will find a natural and convenient inlet at Kyao-chau, by junk and steamer. Such merchandise destined for so southerly a point as Ichow-fu City has been heretofore forwarded via Chefoo and Weihsien, because of the exorbitant tolls levied at the Grand Canal. From this city west to Chinanfu the railway has a choice between the line of the cart road, which trends to the northwest to escape the hill ranges, and after passing the precipitous heights at Tsoup'ing, takes a dive (southwest) to the capital. The other route passes through the mountains by a tortuous succession of valleys, tapping the mineral deposits of Chihch'uan and Po-shan, the latter being rich in coal and fire clay. The native potteries of this region distribute their wares over all Shantung.

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* See CONSULAR REPORTS No. 212 (May, 1898), p. 140.

CONTRACT FOR RAILWAY IRON IN CHINA.

Consul-General Goodnow writes from Shanghai, under date of May 4, 1898, that bids for track material for the imperial railway had been requested, including 4,000 tons of rails, 265 tons of fish plates, 26 tons of track bolts, and 90 tons of track spikes. The rails are to be each 30 feet long, weigh 85 pounds per yard, carry 24 tons in the center, and be 5⅜ inches high by 5⅜ inches at the base. The consul-general notes that the shape of the rail is not the standard employed in the United States. Bids were to be received until April 30, 1898, and the material is to be delivered at Tientsin—one-half before August 31 and the remainder before September 30. The freight, insurance, etc., adds Mr. Goodnow, amount to about $5.50 gold per ton from Chicago, $7 per ton from New York, and $7.50 per ton from London or Antwerp. The following tenders were presented:

Name of bidder.	Makers.	Rails.	Fish plates.	Bolts.	Spikes.
1. Fobes & Co	Batt & Co., Limited	$116,000.00	$11,660.00	$1,705.86	$5,200.00
2. Shewan, Tomes	Campbell	117,806.00	9,817.00	1,895.00	5,905.00
3. Jardine, M., & Co	do	126,603.00	10,323.00	2,027.00	6,405.00
4. American Trading Co	Illinois Steel Co	142,155.00			
5. Schiller & Co	Campbell	116,640.00	9,739.00	1,876.00	5,012.00
6. Mitsui B. Kaisha	do	186,746.00			
7. A. W. Bash	Lackawana	132,921.00	10,690.00	1,473.00	5,103.00
8. Spitzel & Co	Cambria	135,108.00	10,935.00	1,458.00	5,793.00
9. Vanderstegen	Cockerill	131,240.00	....	1,505.80	4,898.70
10. Carlowitz & Co	Campbell	120,522.00	9,969.30	1,898.00	6,148.80
11. Fearon, Daniel	Cambria	126,117.00	11,956.00	1,774.00	5,344.60
12. Buchheister	Campbell	116,800.00	9,764.00	1,866.00	6,080.00
13. China and Japan Trading Company.	do	121,014.00	9,963.00	8,043.00	....
14. Arnhold, K., & Co	Carnegie	148,522.00			
15. Lautz & Co	....	128,790.00	10,449.00	2,041.00	6,318.00

Of the bids, says Mr. Goodnow, Nos. 1, 2, 3, 5, 6, 10, 12, 13, and 15 are for English rails; No. 9 is for rails from Belgium; and Nos. 4, 7, 8, 11, and 14 are American. Maps and specifications are inclosed.

Under date of May 14, 1898, the consul-general informs the Department that the contract has been awarded to A. S. Fobes, an American citizen representing an English establishment, as follows:

		£	s.	
4,000 tons (2,240 pounds) steel rails	per ton	6	0	=$29.20
Sufficient fish plates for above	do	9	0	= 43.80
Sufficient track bolts for above	do	13	10	= 65.70
Sufficient spikes for above	do	12	0	= 58.40

One-third of the price is to be paid with the order, one-third on shipment, and one-third on delivery.

As the Taku wharf, adds Mr. Goodnow, has only 12 to 13 feet of water during spring tides, it will be necessary to lighter the iron about 15 miles before it reaches the wharf where it is to be placed.

OPEN PORTS IN CHINA.

I inclose a list of the treaty ports and ports of call in China, showing the date of opening the custom-houses, the estimated population, and the total foreign trade in 1897 of each of said localities.

A map of China is also inclosed, showing the location of the treaty ports.* These have been prepared with great care by Mr. H. G. Squiers, secretary of this legation.

List of treaty ports and ports of call.

Port.	Year.	Population.	Total foreign trade.	
Treaty of Nankin with Great Britain, August 29, 1842.			*Hk. taels.*	
1. Canton	1859	2,500,000	33,660,328	$24,874,982
2. Amoy	1862	96,000	13,047,810	9,622,332
3. Fuchau	1861	650,000	8,646,921	6,390,075
4. Ningpo	1860	255,000	770,375	569,319
5. Shanghai	1854	475,000	210,614,052	155,643,784
Treaty of Tientsin with Great Britain, July 26, 1858.				
6. Niuchwang	1861	60,000	7,189,241	5,312,849
7. Chefoo	1861	35,000	5,074,020	3,749,701
8. Swatow	1860	35,000	12,763,583	9,432,288
9. Kiungchau	1876	40,000	3,243,437	2,395,898
Not especially named in the treaty, but afterwards designated.				
10. Hankau	1862	800,000	3,596,204	2,657,505
11. Chinkiang	1861	140,000	2,343,039	1,731,506
12. Kiukiang	1862	55,000	5,800	4,286

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* Filed for reference in the Bureau of Foreign Commerce, Department of State.

List of treaty ports and ports of call—Continued.

Port.	Year.	Population.	Total foreign trade.	
Pekin convention with Great Britain, October 24, 1860.			*Hk. taels.*	
13. Tientsin	1861	950,000	19,361,897	$12,091,442
Treaty between France and China, October 25, 1860.				
14. Nankin	(*)	Unknown.	....	....
Treaty with Russia, November 2, 1860.				
15. Kashgar	(*)	Unknown.	....	....
Chefoo convention with Great Britain, September 13, 1876.†				
16. I'chang	1877	34,000	No report.	....
17. Wuhu	1877	79,700	11,040	8,159
18. Wenchow	1877	80,000	14,450	10,679
19. Pakhoi	1877	20,000	4,158,560	3,073,176
Treaty with France, June 26, 1887.				
20. Lungchow	1888	22,000	108,947	80,512
21. Mengtsz	1888	12,000	3,451,765	2,550,854
22. Manhao	(*)	Unknown.	....	....
Additional articles to the Chefoo convention with Great Britain, March 31, 1890.				
23. Chungking	1890	300,000	No report.	....
Regulations appended to Sikkem-Thibet convention of 1890 with Great Britain, December 5, 1893.				
24. Yatung	1894	Unknown.	No report.	....
Convention with Great Britain, March 1, 1894.				
25. Manwyne	(*)	Unknown.	....	....
Treaty with Japan, Shimoneseki, April 17, 1895.				
26. Shashih	1896	73,000	No report.	....
Chungking (see under No. 23).				
27. Suchow	1896	500,000	....	....
28. Hangchow	1896	700,000	....	....
Gerard supplementary convention with France, June 20, 1895.				
29. Szemao	1896	15,000	185,974	137,435
Under special article of treaty with Great Britain, February 4, 1897 (both on West River).‡				
30. Samshui	1897	4,000	38,307	34,309
31. Wuchow	1897	50,000	1,767,312	1,306,044
Opened by an imperial decree of March 31, 1898.				
32. Yochow	(*)	Unknown.	....	....
33. Santuao	(*)	Unknown.	....	....
34. Chinwangtao	(*)	Unknown.	....	....
Opened by imperial decree, April 7, 1898.				
35. Woosung	(*)	Unknown.	....	....

* Not opened.

† Under this same convention goods are allowed to land at the following places (ports of call) on the Yangtze River: Tatung, Nganching, Hukou, Wusueh, Luchikou, Shashih (made a treaty port by the treaty with Japan, April 17, 1895).

‡ Under the same article the following ports on the West River were also made ports of call: Kungmoon, Kumchuck, Shiuhing, Tahking.

CHARLES DENBY,
Minister.

PEKIN, *April 20, 1898.*

OCCUPATION OF PORT ARTHUR.

PROCLAMATION BY THE CHINESE GENERAL.

Consul Fowler, of Chefoo, under date of April 14, 1898, incloses translation of a proclamation issued by General Sung, who was in charge of Port Arthur up to the time of the occupation by Russia, as follows:

PROCLAMATION ISSUED BY SUNG, JUNIOR GUARDIAN OF THE HEIR APPARENT, EX OFFICIO PRESIDENT OF THE BOARD OF WAR, COMMANDER IN CHIEF, ETC.

I have had the honor to receive telegraphic instructions from the Tsung-li Yamên to remove to Ying k'ou (Niuchwang), Port Arthur and Ta-lien-wan being leased to Russia and the forts handed over to their control. These are the wishes of my Emperor.

Henceforth they will be open ports and will daily increase in prosperity.

The removal of my troops, however, must not cause alarm, but, on the contrary, you should peaceably pursue your avocations as hitherto and continue to till the fields as of old, each one quietly attending to his own affairs. There is no need to move away. Moreover, Russian officials will be especially careful in their treatment of you.

In all lawsuits you will continue to lay your cases before the Chinchow T'ing for his decision and adjustment, and act in every way as before.

Now that I am leaving you, I deem it right to first issue this proclamation, by which merchants and others are expected to understand that there is no cause for alarm, and I sincerely trust that in all matters you will proceed as usual.

PROCLAMATION BY THE RUSSIAN ADMIRAL.

Minister Denby writes from Pekin, April 15, 1898:

I have the honor to inclose a translation of a proclamation issued by the Russian admiral relating to the Liao Tung Peninsula.

By this proclamation the northern limit of Russian territory is about 30 miles north of Kinchow and the eastern limit is Pietzu-woa.

PROCLAMATION ISSUED BY THE ADMIRAL COMMANDING THE RUSSIAN NAVAL SQUADRON ON THE PACIFIC AND THE RUSSIAN NAVAL AND MILITARY FORCES OF THE LIAO TUNG PENINSULA.

Whereas a telegram has been received from the Czar of Russia to the effect that it is the earnest desire of the Emperor of China to maintain relations of friendship between the two countries, and that every effort should be made to assist each other—

It has therefore been agreed that Port Arthur, Ta-lien-wan, and places in the vicinity thereof are to be leased to the Russian Government for the period of twenty-five years. The area of territory so leased extends from Port Arthur north to Pu-

Tao-tien and Pietzu-woa. It is important that measures should be adopted to preserve order and maintain peace within the limits of the above-named places.

Acting under instructions, I assumed charge of the above-named places on the 28th of March. The Chinese troops have been withdrawn, and orders have been given by me that the forces under my command are to exercise due vigilance and care to afford protection to the Chinese, to the end that they may carry on their daily pursuits without fear. Important questions that may arise must be presented to me for my consideration and action to be taken thereon. Merchants and traders will be allowed to pursue their respective callings as heretofore. Criminals or disorderly characters (Russian or Chinese) will be dealt with according to the laws of their respective countries. This proclamation is issued for general information. Let every one respect and obey it.

Issued on the 5th of April.

JAPANESE-RUSSIAN PROTOCOL RELATIVE TO KOREA.

I inclose herewith a draft translation of a new protocol negotiated between Japan and Russia, in relation to Korea, on the 25th ultimo, the text of which is published in to-day's Official Gazette.

A. E. BUCK,
Minister.

TOKYO, *May 10, 1898.*

PROTOCOL.

In accordance with the provisions of Article IV of the protocol signed at Moscow on June 9 (May 28), 1896, by Marshal Marquis Yamagata and Prince Lobanow, Secretary of State, it is hereby agreed by Baron Nissi, His Imperial Japanese Majesty's Minister for Foreign Affairs, and Baron Rosen, Counselor of State, etc., envoy extraordinary and minister plenipotentiary of the Emperor of all the Russias, having been duly authorized thereto by their respective Governments:

I. That the Governments of Japan and Russia, recognizing the sovereignty and complete independence of Korea, shall in no way directly interfere with the domestic government of that country.

II. That in order to avoid misunderstandings in the future, whenever either Japan or Russia is applied to by Korea for advice or assistance, neither contracting party shall take any steps toward the appointment of military instructors or financial advisers without previous consultation with the other.

III. That Russia, recognizing the great progress made in commercial and industrial enterprises by Japan in Korea, and the great number of Japanese subjects residing in the settlements, will do nothing to injure the development of the commercial and industrial relations between Japan and Korea.

Done in duplicate at Tokyo, this 25th day of April, 1898.

NISSI.
ROSEN.

SPANISH WAR AND CIVIL ESTABLISHMENT IN THE PHILIPPINES.

I submit certain interesting particulars regarding Spanish cruisers and mail steamers, as well as coal deposits, armament, cable, railways, etc., in the Philippines, which I succeeded in obtaining here and supplied to Commodore Dewey previous to his departure from Hongkong.

SPANISH SQUADRON IN THE PHILIPPINES.

Name.	Tons.	Guns.	Speed.	Remarks.
			Knots.	
Reina Cristina	3,500	6	14	Although 14 knots is her official speed, this vessel can only do 12½ to 13. She is the best ship the Spaniards have here; but must have suffered considerable deterioration to her guns, which were made pretty free use of during bombardment of Cavite last year.
Castilla	3,260	6	10	Flagship; bottom said to be in very defective state and unable to make a journey to Hongkong.
Isla de Cuba	1,048	4	12-13	New protected cruiser, just out from Spain.
Isla de Luzon	1,048	4	12-13	New protected cruiser, just out from Spain, but took nearly three months to come out via canal, owing to several breakdowns.
Don Juan de Austria	1,100	4	10-11	Called a cruiser, but really only a gunboat; has been some years in the Philippines.
Don Antonio de Ulloa	1,200	4	11	The best gunboat the Spanish have.
Marques del Duero	500	3	10	Gunboat with exceptionally long ram.
General Lezo	500	3	10	Gunboat similar to Duero.
Elcano	560	3	10-11	Do.
Velasco	1,100	3	9-10	Old fashioned gunboat.
Manila	1,900	2	9	Transport; formerly merchant steamer.
General Alva	1,200	2	9	Do.
Cëbu	500	2	8-9	Transport; very old.
Argos	500	2	8	For service of hydrographical commission; very old; formerly a coasting steamer.

Besides these, there are four small coasting gunboats built in Manila, about 80 tons each, armed with one gun and a Nordenfeldt, some with two of the latter; also several small launches for river work, armed with either Gatlings or Nordenfeldts.

SPANISH MAIL STEAMERS.

The Spanish steamer *Elcano* or another boat belonging to the Compañia Maritima leaves Manila for Singapore every twenty-eight days, in connection with French mail steamers returning homeward with mails after arrival of outward steamer.

The Spanish Royal Mail Line from Manila direct to Barcelona, calling at Singapore, Colombo, Aden, and Port Said, also leaves Manila every twenty-eight days. Next dates of departure are May 7, June 4, and July 2. These dates, however, may be altered at the last moment by the governor-general. During the southwest monsoon the boats do not always call at Colombo.

The local mail steamers from Manila to the provinces leave Manila every alternate Saturday (in the northeast monsoon, about 10 a. m.; in the southwest monsoon, about 4 p. m.).

The North Luzon Line is from Manila to Subic, Olangapo (the north arsenal and where the large floating dock is to be erected), Bolinao, San Fernando, Croayan, Currimas (all these on the west coast of Luzon and Aparri, entrance to Rio Grande in the extreme north of Luzon).

The South Luzon Line runs from Manila to Batangas, Calapan, Laguimanos, Passacao, Donsol, Sorsogon, Legaspi, and Tabaco.

The Southeast Line runs from Manila to Romolon, Cëbu, Cabolian, Surigao, Camiguin, Cagayan de Misamis, Iligan, Harihohoe, Bais, Dumagete Iloilo.

The Southwest Line runs from Manila to Iloilo, Zamboanga, Isabela de Basilan, Iolo (Sula) Siassi, Tataan, Bongao, Parang Parang, Cottabato, Glan, Sarangani, Dayas, Matti Lebak, St. Maria.

These steamers return to Manila from eight to ten days after leaving; local steamers for the neighboring islands leave nearly every day.

COAL DEPOSITS.

On the small island of Batan, to the southeast of Luzon, just through the Straits of San Bernadino, there are extensive coal deposits, now worked by Messrs. Gil Hermanos, of Virao, Island of Catanduanes. This coal is used by their own steamer, *Josefa Gorroño*, plying round the coast of Catanduanes and occasionally coming to Manila with hemp, and also by other local steamers. The mine is called Visaya, and stocks of coal are generally on the beach. There is a safe anchorage for vessels close by during the northeast monsoon. In the southwest monsoon, vessels can anchor anywhere around in smooth water. The coal is not equal to Japanese, but is good enough for an emergency, and easily obtainable. The mines are situated in latitude 13° 15″ north, longitude 130° 16″ east (Meridian of San Fernando), approximately.

Other extensive coal mines are also being worked in the village of Compostela, close to the city of Cëbu. This coal is of superior quality, and stocks are always available.

A railway to the sea is in course of construction and probably finished by this time. Several Government and English steamers have coaled there already.

These mines and the city of Cëbu could easily be taken, the only defense of Cëbu being the cotta, or small fort, mounted with old muzzle-loading guns, unless modern ones have been sent there lately, which I doubt.

RECENT FORTIFICATIONS.

A new fort has just been constructed around the powder magazine of San Antonio Abad, just outside the suburb of Malate (Manila), on the shores of the bay, about 1 mile distant from Malate Church. The roof of the powder magazine is visible from vessels in the bay.

ARMAMENT, CABLE, AND RAILWAYS.

Three guns have also been sent down to Corregidor Island (at the entrance to the Bay of Manila) for fortifications to be erected.

The new cable is now being laid from Cape Bolinao to Manila (Malate, about 2 miles to the south of the old city walls). It is to pass through the Boca Chica, or narrow passage between Corregidor Island and the mainland. The cable to the Visayas Islands from Manila, laid a few months ago, passes through Boca Grande, somewhat nearer the Cavite or south shore.

The terminus of the Manila Railway, 196 kilometers (121 miles) long, is at Dagupan, in the Gulf of Lugayan. Dagupan is about 1 mile as the crow flies from the shore of the gulf, and is situated on a branch of the River Agno. Only vessels of 6 to 7 feet draft can cross the bar, which is easily distinguishable from the fact of a large iron-roofed house situated in a cocoanut grove being exactly in front of it. There is any amount of water inside the bar, up to the town itself.

E. SPENCER PRATT,
Consul-General.

SINGAPORE, *May 3, 1898.*

TARIFF CHANGES IN GUADELOUPE.

I have the honor to report that changes have been made in the duties on certain articles imported into this colony in considerable quantities and, in great measure, from the United States. I inclose a tabular statement of these new duties, showing the old duties and the increase. This new tariff was ordered in France April 9, and was promulgated here May 13.

Articles.	Unit.	New tariff.				Old tariff.				Increase.			
		General.*		Minimum.†		General.*		Minimum.†		General.*		Minimum.†	
		Francs.		*Francs.*		*Francs.*		*Francs.*		*Francs.*		*Francs.*	
Horses:													
Stallions or geldings and mares, 5 years and over	Head	200	$38.60	150	$28.95	30	$5.79	....	....	170	$32.81	150	$28.95
Stallions or geldings and mares, under 5 years	do	150	28.95	100	19.30			....	....	120	23.16	100	19.30
Colts	do	75	14.47	50	9.65	20	3.86	....	....	55	10.61	50	9.65
Mules, male and female	do	50	9.65	30	5.79	5	.96	....	....	45	8.68	30	5.79
Margarin, oleomargarine, alimentary grease, and similar substances.	100 kilograms (220.46 pounds) net.	35	6.74	25	4.82	20	3.86	15	$2.89	15	2.89	10	1.93
Butter	do	30	5.79	20	‡3.86	13	2.50	6	‡1.15	17	3.28	14	2.70
Boric acid:													
Native, from Tuscany, with 15 per cent and over of impurities.	100 kilograms	Free.	....	Free.	....	Free.	....	Free.	....	....	....	....	....
All other	100 kilograms gross.	18	3.47	12	3.21	Free.	....	Free.	....	18	3.47	12	2.31

* General tariff dues are applied to articles of other than French derivation.

† Minimum tariff dues are applied to articles sent to colonies from France.

‡ Per 100 kilograms (220.46 pounds) gross.

A still more important change is soon to be made in the local or colonial tariff. In addition to the general federal tariff, this colony has heretofore imposed other duties for local expenses. The most important of these local duties was that known as the "droit de consommation," a sort of internal-revenue tax. From this source about 625,000 francs ($120,625) have been collected during the past year, and during the years since the tax was first imposed it is estimated that over 6,000,000 francs ($1,158,000) have been collected. There has always been great opposition to this tax, and the French Government recently decided that it was illegal, and ordered the money thus collected to be returned. The 625,000 francs collected last year will probably be returned, but the far larger amounts of previous years may be allowed to lapse.

The colonial government now finds itself confronted with the problem of raising from some source not less than 625,000 francs yearly. The privy council, which has been occupied with this question, will shortly formulate a new schedule of duties, which will be imposed chiefly, I am informed, on flour and other articles which are brought from the United States and which have heretofore enjoyed certain favorable discriminations. If the new duties merely impose a tax equal to the "droit de consommation," which they are to supersede, no harm will occur; but new articles are to be taxed, and it is certain that an attempt will be made to collect a far greater amount, both to cover such claims as must be paid (about 500,000 francs=$96,500) and to gain a greater revenue.

The colony is now suffering from a short supply of flour and other food products, and of lumber,* and prices have risen.

LOUIS H. AYMÉ,
GUADELOUPE, *May 24, 1898.* *Consul.*

NEW TARIFF OF JAMAICA.

Consul Dent sends from Kingston, under date of June 13, 1898, the following copy of the new tariff law of Jamaica:

TARIFF LAW OF MAY 13, 1898.

Be it enacted by the governor and legislative council of Jamaica as follows:

(1) On and after the coming into operation of this law, there shall be raised, levied, collected, and paid unto Her Majesty, her heirs and successors, for the use of the government of this island, upon the several articles imported into this island and enumerated in the first and second schedules to this law, the several duties therein set forth in lieu of the duties now payable on the said articles, respectively, or in lieu of exemption from duty, as the case may be.

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* See CONSULAR REPORTS No. 214 (July, 1898), pp. 402, 403.

(2) The articles and things enumerated in the third schedule to this law shall, after the coming into operation of this law, be admitted into the island free of duty in lieu of the articles and things heretofore admitted free of duty under the provisions of law 11 of 1867, "A law for laying a duty on imports, exports, and the tonnage of vessels," and law 26 of 1890, law 1 of 1892, and law 34 of 1896 amending the same, which last-mentioned articles or things shall no longer be admitted free of duty.

(3) The following shall be exempt from duty, viz:

Provisions and stores imported by the local government for the public service, and stores, tools, and materials for the Kingston general commissioners, the Spanish town waterworks commissioners, or for any parochial board, on the certificate of the revenue commissioner.

(4) Whenever any local merchant or trader shall have supplied any goods, wares, or merchandise to the local government for the public service, or to the Kingston general commissioners, the Spanish town waterworks commissioners, or to any parochial board for any public or parochial service, the purchaser, on production of a certificate from the revenue commissioner, shall be entitled to a refund of the duty proved to have been paid on the first importation of such goods; provided they have been imported within the limit of time specified in section 6 of law 11 of 1867, and section 107 of law 18 of 1877, as the limit within which drawbacks may be claimed on goods exported.

(5) After the passing of this law, drawbacks of duty shall be allowed, under regulations approved by the governor in privy council, and subject to the provisions of the several acts or laws for the time being in force with reference to drawbacks, on the exportation of the following, namely:

Any materials or things which are not grown or produced in this island, and have been imported into and duly paid import duty in this island, and used in the construction, manufacture, or equipment of any vehicle, machine, or appliances, or for putting up and exporting any of the produce of this island in a manufactured, or partly manufactured, or preserved, form, or in the course of making any tins, boxes, packages, or cases for such purpose.

No application for a drawback under this law shall be made or entertained when the original value of the materials or things used for the manufacture or equipment, or the putting up of any such vehicle, machinery, appliance, or produce, shall be less than £2.

(6) This law shall come into operation as from and after the date of the governor's assent thereto, and shall continue in operation until the 30th day of April, 1890.

SCHEDULE I.

Articles.	Tariff.			
	£	s.	d.	
Bacon......per pound...	0	0	2	$0.04
Beef:				
Wet salted or cured......per barrel of 200 pounds...	0	15	0	3.64
Smoked or dried......per pound...	0	0	2	.04
Bread and biscuits......do......	0	0	0½	.01
Butter and butter substitutes......do......	0	0	2	.04
Cheese......do......	0	0	2	.04
Chicory......do......	0	0	6	.12
Fish (alewives, herrings, mackerel, and pickled, unenumerated), per barrel of 200 pounds......	0	4	0	.97
Gunpowder, dynamite, and other explosives......per pound...	0	1	0	.24
Hams......do......	0	0	2	.04

SCHEDULE I—continued.

Articles.	Tariff.			
	£	s.	d.	
Lard ... per pound ...	0	0	1	$0.02
Lard substitutes, including cottoline ... do. ...	0	0	1	.02
Matches, lucifers and others, per gross of 12 dozen boxes, each box to contain 100 sticks, and boxes containing any greater or lesser quantity to be charged in proportion ...	0	4	0	.97
Meal (not wheat meal) ... per barrel of 196 pounds ...	0	2	0	.48
Pork, wet salted or cured ... per barrel of 200 pounds ...	0	15	0	3.64
Spirits:				
Brandy, whisky, gin, and other distilled spirits, per gallon of proof spirits as ascertained by Sykes' (or Sikes') hydrometer (provided that in no case shall the duty be less than 12s. 6d. per liquid gallon) ...	0	16	0	3.89
Cordials, liqueurs, and similar spirituous compounds, not being perfumes, irrespective of strength ... per gallon ...	0	12	6	3.04
Tobacco leaf ... per pound ...	0	1	0	.24
Animals, alive, except pure-bred certificated stock for breeding purposes:				
Horned stock ... per head ...	1	0	0	4.86
Horses, mares and geldings, and mules ... do. ...	2	0	0	9.73
Asses ... do. ...	0	10	0	2.43
Sheep, goats, and swine ... do. ...	0	2	6	.60
Eggs ... per 1,000 ...	0	0	1	.02
Molasses ... per 100 gallons ...	0	0	1	.02

SCHEDULE II.

Articles.	Tariff.			
On all articles of food and drink for man, not otherwise enumerated, that is to say:				
Farinaceous substances—	£	s.	d.	
Starch of corn ... per £100 value ...	20	0	0	$97.33
Fish—				
Oysters, preserved in cans; preserved other than by salting ... do. ...	20	0	0	97.33
Fruits, preserved ... do. ...	20	0	0	97.33
Meat—				
Beef and pork preserved in cans, other than by salting; tongues, dried or smoked ... per £100 value ...	20	0	0	97.33
Milk, condensed ... do. ...	20	0	0	97.33
Pickles, vinegar, sauces, condiments, and confectionery ... do. ...	20	0	0	97.33
Provisions not otherwise enumerated ... do. ...	20	0	0	97.33
Yeast cake and baking powder ... do. ...	20	0	0	97.33
And all other articles of food or drink or articles intended to be used, or incorporated with food or drink, not otherwise specially enumerated, per £100 value ...	20	0	0	97.33
On all articles of apparel and personal adornment, that is to say:				
Apparel and slops ... per £100 value ...	25	0	0	121.66
Cottons (hosiery of cotton or of cotton mixed with other material) ... do. ...	25	0	0	121.66
Haberdashery and millinery, including embroidery and needlework (comprehending all minor articles used in the making up of apparel or of mixed or undescribed materials and not capable of being accurately allotted to the separate heads of cotton, linen, silk, or woolen manufactures), per £100 value ...	25	0	0	121.66
Hats, bonnets, and caps, whether of felt, cloth, straw, or any other material ... per £100 value ...	25	0	0	121.66
Linen:				
Piece goods ... per £100 value ...	20	0	0	97.33
Other manufactures ... do. ...	20	0	0	97.33

SCHEDULE II—continued.

Articles.	Tariff.			
	£	s.	d.	
On all articles of apparel and personal adornment, etc.—Continued.				
Silk manufactures—				
Broadstuffs or silks or satin, handkerchiefs or shawls, and ribbons of all kinds unenumerated............per £100 value...	25	0	0	$121.66
Woolen and worsted manufactures—				
Cloths of wool, cloths mixed with other material, and woolens unenumerated............per £100 value...	20	0	0	97.33
Boots and shoes, whether of leather, canvas, rubber, or other material, per £100 value............	25	0	0	121.66
Perfumery and perfumed waters of all descriptions; also perfumed soap and similar toilet requisites............per £100 value...	25	0	0	121.66
Umbrellas and parasols............do......	20	0	0	97.33
On all articles of hardware, cutlery, plated ware, jewelry and fancy goods, manufactured wholly or partly of metal—that is to say, all articles not otherwise enumerated for use in arts, sciences, trades, or manufactures, or for domestic purposes, including implements, tools and appliances, utensils, stoves and accessories, and all articles used in the construction, equipment, adornment, or furnishing of houses or other buildings and structures, or in the inclosing, dividing, equipment, adornment, or furnishing of gardens and pleasure grounds, save and except beams, girders, rafters, columns, staircases, floor plates, sheets and tiles for roofing, and roof or eaves gutters, and pots and crucibles for melting metals; chests, trunks, and boxes of metal; weights and scales and weighing machines; cages and coops for birds or other animals; traps for catching vermin; lamps, lanterns, and lampware; firearms, swords, daggers, and other offensive or defensives weapons; razors, knives, and scissors of all descriptions and sizes; and forks and spoons of all descriptions and sizes............per £100 value...	20	0	0	97.33
Gold and silver plate and other ware, plated and gilt ware, clocks and watches, bells and accessories and appliances therefor, jewelry, fancy articles, bric-a-brac and other articles of "virtu," and articles for personal use and adornment............per £100 value...	25	0	0	121.66
And on any part or parts of every one of the above-mentioned articles per £100 value, according to the same rates as for the completed article.				
On carts, wagons, cars, and barrows, with or without springs, of all descriptions, not being vehicles of pleasure, and parts thereof............per £100 value...	5	0	0	24.33
Other vehicles ordinarily used as vehicles of pleasure............do......	20	0	0	97.33
Patent medicines, not being pharmacopœial drugs............	20	0	0	97.33
And after these rates for any greater or less quantity of such goods respectively.				

SCHEDULE III.—FREE LIST.

Animals, alive, not enumerated, including poultry and other birds.

Apparatus and appliances of all kinds for generating, storing, conducting, converting into power of light and measuring electricity.

Apparatus and appliances for generating and storing gas.

Bags and sacks made of flax, hemp, or jute.

Bees, beehives, and all accessories for apiaries.

Belting for machinery.

Books, printed, bound and unbound; pamphlets, newspapers, and printed matter, in all languages.

Bridges of iron, steel, or wood, or combination thereof.

Bullion and coins.

Coal, coke, and patent fuel.

Cotton seed, including meal and meal cake.

Cotton wool.

Fertilizers of all kinds, natural or artificial including guano and other manures

Fresh fish.

Fire engines and fire extinguishers.

Fruits and vegetables, fresh.

Hydraulic presses.

Ice.

Implements, utensils, and tools for agriculture, including axes, bill-hooks, cutlasses, diggers, forks, grass knives, hoes, picks, shovels, and spades.

Lime of all kinds.

Locomotives, railway rolling stock and parts thereof, rails, railway ties, and all materials for railways and tramways.

Lymph for vaccination.

Machines for preparing fiber or for spinning cotton or wool, and sewing machines.

Machines for preparing for market coffee, cocoa, kola, and pimento.

Malt dust.

Mess plate and furniture, band instruments for the use of the army, navy, or militia on the certificate of the military or naval commanding officer.

Mills, whether for grinding canes, paint, coffee, corn, or grain, or for sawing timbers or raising water, and all parts of such mills.

Oil cakes for feeding cattle.

Pans for boiling sugar.

Pipes for conveying fluids, including fire and other hose, but not including hollow columns for supporting any part of a building or any roof.

Printing paper, presses, type, rules, spaces, and all accessories for printing.

Pumps for raising water.

Rock salt.

Shooks, tierce, puncheon, hogshead, barrel and cask, and shooks for boxes used in packing native agricultural produce.

Slates for roofing, school slates, and slate pencils.

Specimens illustrative of natural history, mineralogy, and geology.

Steam engines, boilers, and steam pipes, and parts thereof, and prime moter engines of all kinds and parts thereof, and machines, machinery, and apparatus, whether stationary or portable, worked by power or by hand, for agriculture, irrigation, mining, the arts and industries of all kinds, and all necessary parts and appliances for the erection or repair thereof, or for the communication of motive power thereto.

Stills and all parts thereof.

Tallow and animal greases, grease, or slush.

Tan bark of all kinds, whole or ground.

Tow.

Trees, plants, vines, and seeds and grain of all kinds, not otherwise enumerated, for propagation or cultivation.

Tortoise shell and turtle-shell.

Wire of all kinds, coated or uncoated.

Wire netting for fences and iron standards, and droppers for fences of wire, and hooks, staples, and like appliances for fastening the wires of fences.

Wood hoops and truss hoops.

Wood staves and headings.

TAXATION IN SZECHUAN.

Taxes are levied upon salt, agricultural land, and on opium. There is no per capita tax in China.

The tax on salt is about 6 copper cash per catty (0.27 cent per 1.33 pounds), and I estimate the Szechuan government raises about 6,000,000 taels* from this article in taxes at the present rate of cash, which is about 1,100 to the tael.

The gross production of Tzu-lin Ching and Kung Ching together, pan salt and granular, making allowance for local consumption and peculation, is stated to be about 85,000 yin a year. A yin, on the average, consists of 10,000 catties (13,333 pounds). Six hundred thousand tons may be safely put down as the gross annual production of the Fushun River district, in which the above-named places are situated. The Fushun River is one of the tributary streams connecting the provincial capital with the Yangtze; Lu Chow, the center of the Government salt trade, being at the junction of the two streams. Tung-chuan Fu, in the north of the province, produces salt in large quantities; but not so much is obtained from these wells as from the celebrated pits of Fushun. The salt wells in this prefecture produce over 60,000 yin, or, say, 225,000 tons, of salt a year, and supply the northern part of the province, as well as a portion of Shensi province. These factories are under strict Government supervision and bring a revenue of the amount above stated into the Szechuan treasury. Selling value of Szechuan salt at home and abroad reaches 60,000,000 taels† a year, it is estimated.

LAND TAX.

I extract the following from E. H. Parker's Up the Yangtze:

> It is said that nothing can be more complicated than the land tax of Szechuan, which, nominally the lightest, is in reality the heaviest in the Empire. The magistrates are absolutely compelled to eke out their insufficient salaries by exacting double or treble the land tax, whilst the runners receive no pay whatever, and they look to warrants as their emoluments. When a runner receives a warrant, no matter for what purpose—whether to collect taxes, arrest offenders, or summon litigants or witnesses—he feeds on his "little brief authority" until he has reached the limit of his conscience, fear, or good nature.
>
> Annual proclamations are posted about the land tax, very often stating that in addition to the ordinary land tax an extra tax, or so much again, will be required for that year and in addition there are other forced contributions amounting to six times the ordinary land tax, or about 4,000,000 taels ($2,564,000) for the whole province.

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* 6,000,000 taels=$3,846,000 gold.

† 60,000,000 taels=$38,460,000 gold.

Land-tax proclamations are issued by the treasurer of the province. The regular land tax is 668,000 taels ($466,948) per annum. Districts, on account of their poverty, are relieved from contributing to the extra tax, and certain lands called military and common tenures are relieved also; so that the total yield from the extra tax is only 500,000 taels ($320,500). According to the proclamation, 230,000 taels ($147,430) go to the maintenance of the Tartars in Pekin, and 150,000 taels ($96,150) to the maintenance of the Tartar and Chinese armies of the province.

All landowners pay their land tax within the third to the seventh moons. They take their papers to the magistrate's yamên, and pay from 50 to 200 cash (3.2 to 12.8 cents) the mow (one-sixth of an acre) of ground, according to the class of land. If the owner does not pay within these five months, he is fined double the amount he ought to have paid.

OPIUM.

The farmer is not taxed for growing opium—not until he intends to sell it, when he is obliged to pay a tax on it that is termed likin. The amount of likin sent to the provincial treasurer for the whole province is about 480,000 taels ($207,680 gold) per annum on .100,000 piculs (13,333,333 pounds) of the drug, which is estimated to be about the yearly production. The opium, from what I can learn, is carried to the likin office after entering the city, the tax paid, and a receipt given.

On entering the city gate a small sum is collected by the branch office there; but this is only a perquisite, and is not considered legal.

GEO. F. SMITHERS,
Consul.

CHUNGKING, *March 17, 1898.*

DIAMONDS IN SHANTUNG.

Consul Fowler writes from Chefoo, April 12, 1898:

I have already mentioned the existence of diamonds in this province of China (see CONSULAR REPORTS No. 198, March, 1897, p. 384). I have been investigating the subject, and inclose an extract from a letter written by a gentleman living near the fields. The section described, it should be noted, is entirely different from that mentioned in previous reports, and serves to show that the whole province is a vast mineral field. The extract reads:

In reply to your question about the diamond fields in this vicinity, it is my personal opinion that they are well worth exploiting. Just after the main road to the south (Ching Kiang P'u) crosses the I Sui River, at a point 45 li (about 18 miles) southeast of here, it passes through the market town of Li Chia Chuang. East of this town, and about 10 li (4 miles) distant therefrom, lies a low, sandy ridge, which extends south, parallel to the road above mentioned. The diamonds are found along this ridge for a distance of at least 20 li (8 miles). They are not found in abundance, probably owing to the fact that no systematic search is made for them. The natives say that it is impossible to find them by digging, because they are produced by the action of the rains on the soil. Of course, the fact is that they are simply washed out by the rains. They are picked up by the farmers and sold to the regular agents, who come at certain seasons from Pekin. The stones found seem to be chiefly small and of tea color. They are in demand for drill points; but good, first-water stones are also found, occasionally as large as a hazelnut. For the best stones the regular market price on the ground is said to be 2,000 large cash ($240 Mexican,* at current rates) per one-hundredth part of the native ounce (the native ounce=1⅓ ounce avoirdupois). It is apparent that the value of the stones is well recognized.

In recent years the traffic seems to have fallen off. The natives say it is because of the increasing poverty of the great families. I have only seen one specimen, and that was a fairly good one, about as large as a split pea. I should think that one might buy a good specimen for $10 to $20 Mexican.

The mineral resources of this province are something wonderful. The Germans know what they are about. Twenty-five li (about 8 miles) southwest of this city are beds of good soft coal, which the natives mine. They make a good article of coke, which we use in our stoves. It costs 5½ cash per catty, *i. e.*, about 60 cents Mexican per 100 catties (26 cents per 133⅓ pounds). In the same region iron abounds. Forty-five li (18 miles) west of the city is a small hill composed of what seems to be phenomenally pure red oxide of iron. For that matter, the south extremity of this city rests upon a hillock from which good ore crops out.

Coarse native pottery is made near the coal mines above referred to. Far to the north of the city, in the mountains of I Sui and Ming Yin, are deposits of gold, silver, and lead of unknown value. A native friend of ours a few years ago organized a company and opened a silver mine in Ming Yin. They produced, with very crude methods, excellent silver in paying quantities; but the usual thing happened—the jealous neighbors objected, and the officials stopped the work. I have just heard of a placer mine recently opened on the west bank of the I Sui, about 160 li (nearly 65 miles) north of this city. My informant visited it in person. It was worked at night and several thousand cash† worth of gold was taken out of every bucket full of sand.

NAVIGATION OF THE UPPER YANGTZE WITH STEAM VESSELS.

Mr. Archibald J. Little, a British merchant resident of this port (Chungking), has succeeded in bringing hither a good-sized steam launch from Shanghai. This is the first steam vessel to ascend the Yangtze above the treaty port of Ichang, and was about three weeks en route. According to Mr. Little's statement, the journey might have been accomplished in much less time had it not been for numerous delays. He had in tow a small junk and a native gunboat sent by the Chinese for protection. These, of course, retarded his progress, and the speed of his boat was not greater than 10 knots.

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*According to the valuation of the Director of the United States Mint, April 1, 1898, the Mexican dollar=44.4 cents.

†The equivalent of 1,000 cash is about 45 cents.

This only shows what can be done with a full-power, light-draft steamer. It is to be hoped that the navigation of the waters of the Upper Yangtze with steam vessels will be undertaken at no distant date, now that a small beginning has been made.

Vessels to navigate this section of the river must not be over 150 feet long; they must have light draft (say 4 feet) and power sufficient to propel them at the rate of 15 knots an hour. This would give them headway at the swiftest rapids and currents. Steamers of the above dimensions would probably not have much room for cargo, inasmuch as the engines would take up a great deal of space, as well as the accommodation for passengers. The cargo, it is thought, could be taken in tow on board native boats. This method would have the advantage that on reaching a bad rapid, the boat or boats in tow could be liberated and the steamer make the ascent alone; the junks could then be hauled up, as they now are, by coolies, which would still furnish employment to this class of people.

It is thought possible for steamers to run ten months of the year. During the remaining period the lowness of the water would make navigation difficult, if not impossible.

GEO. F. SMITHERS,
Consul.

CHUNGKING, *March 31, 1898.*

PASSPORTS FOR RUSSIAN TERRITORY IN CHINA.

Minister Denby transmits from Pekin, under date of May 21, copy of a note from the Russian chargé d'affaires, relating to the requirement that all foreign subjects going to any part of the territory in Manchuria, recently ceded to Russia, shall bear passports which have been viséed by the Russian consul. The communication reads:

> MR. MINISTER: In conformity with the instructions I have just received from the Imperial Ministry of Foreign Affairs, I have the honor to inform you that all foreign subjects going to Port Arthur and Talien-wan, or to any other point in the territory which has been ceded in usufruct to the Imperial Government by the Chinese Government, must be provided with passports from their respective governments, duly viséed in a Russian consulate.
>
> While so informing Your Excellency, and hoping that you will find it useful to give to your consuls instructions relative to the subject mentioned, I seize the occassion to renew the assurance of my high consideration.
>
> A. PAVLOW.
>
> To His Excellency Mr. DENBY,
> *Envoy Extraordinary and Minister Plenipotentiary.*

Under date of May 15, Minister Denby informs the Department that the Russian consul at Tientsin recently notified the consular body to the same effect.

BALLOONING IN THE HIGH ALPS.

An interesting attempt in behalf of science will be made this summer by Capt. C. Spelterini to cross the high Alps of Switzerland in a balloon, for the purpose of making meteorological and topographical observations. The Swiss Weather Bureau and many Swiss scientists are interested in the venture. If successful, it will be the first air ship that has ever crossed the high Alps.

The principal parts of the balloon have already been constructed in the factory of George Basacon, at Paris, and the basket, network, and other features are being perfected as rapidly as possible. The dimensions of the balloon are as follows: Diameter, 18.41 meters (20.13 yards), circumference, 37.81 meters (41.35 yards); contents, 3,268 cubic meters (115,414.64 cubic feet, or 4,274.61 cubic yards); surface, 1,065 quadrat meters (1,273.74 square yards); weight of balloon, basket, and network, about 2,020 pounds; carrying power, 7,400 pounds.

The movement of the balloon is to be ascertained by topographical and barometrical observations; one registering aneroid barometer and one controlling quicksilver barometer will be used for this purpose. At the time of the journey frequent observations are to be made at the Swiss meteorological stations, and by this plan the coexisting difference of the direction and rapidity of the wind in the various high strata of air are hoped to be obtained. Careful observations are to be made from the air ship as to the humidity and temperature, as well as to the color phenomena of the atmosphere, strata of vapor, formation of clouds, etc. One of the most important and interesting results expected is the photographing of mountains from the balloon. The point of view from which these photographs must be taken in order to be of the greatest use for cartography, geography, geology, as well as for best execution, has been carefully planned; and important results are confidently expected. The science of photography is also to be used in the study of the formation of vapor and clouds in high Alpine altitudes.

The question of from what point and in which direction the aërial journey shall be made has been thoroughly studied by some of the best-known Swiss scientists. Government meteorologists stationed at the highest possible altitudes in Switzerland claim that it is impossible for a balloon to sail over the high Alps from north to south or from south to north, because the south winds are not strong enough to reach the higher air currents, and the strong north winds are so rare that no dependence can be placed upon them. The prevailing wind in the high Alps is from the southwest, and Captain Spelterini claims that, in nearly all of his aërial expeditions in Switzerland, he has been driven northeast whenever he passed an altitude of 10,000 feet. By this experience, he is satisfied that by ascending in Lugano he would, as soon as he had reached the altitude of 10,000 feet, be driven into the Tyrol Mountains. It has therefore been decided that he shall make the ascension at Sitten, in the Canton of Wallis, whence, after reaching an altitude sufficient, he expects to be driven over the Finsteraar group, the Urner and Glarner Alps, toward the Upper Rhine Valley, between Sargans and Lake Constance. The length of this journey would be about 130 miles, and, if the wind is at the rate of from 6 to 10 meters (19 to 32 feet) per second, the journey will be made in about eight hours.

JAMES T. DUBOIS,
Consul-General.

ST. GALL, *May 12, 1898.*

GRAIN IMPORTS OF SWITZERLAND.

Why does the United States supply such a small proportion of the large quantity of cereals imported by Switzerland? During the year 1897 the share of the United States was only about 3⅞ per cent—an insignificant amount as compared with the whole.

The following data compiled from the Statistique du Commerce de la Suisse, covering the fiscal year ended August 31, 1897, shows an increase over the amount imported in 1896 of more than $5,000,000 in cereals alone. The following table will show the import of cereals in 1896 and 1897, and the share of the United States in the latter year:

Articles.	Total Swiss imports.		Share of United States in 1897.
	1896.	1897.	
Maize	$1,029,363	$1,509,596	$84,049
Wheat	11,217,632	14,592,526	685,679
Oats	2,181,481	2,710,465	30,364
Flour	1,293,597	1,940,283	17,026
Bran, etc	556,826	804,671	22,300
Total	16,278,899	21,557,541	839,418

MAIZE.

Is there any reason why the United States should only receive $2.12 per quintal (220.46 pounds), and, at that low price, sell only $84,000 worth, while Russia, at $2.26 per quintal, heads the list by shipping $368,000 worth, followed by the Danube district with $246,000 worth, at $2.31? It is well known that the American maize is equal, if not superior, to the Russian product Of the $1,500,000 worth of maize imported by Switzerland in 1897, the share of the United States was but 5.9 per cent. Are the Russian exporters and shippers more energetic than our own? The following table shows imports of maize:

From—	Quantity.	Value.	Average price per quintal.
	*Quintals.**		
Austria	24,443	$78,382	$2.80
Italy	34,252	98,404	2.87
Russia	163,248	368,239	2.26
Danube district	106,508	246,329	2.31
Turkey in Europe	2,465	5,000	2.03
United States	**39,165**	**84,049**	**2.12**
La Plata	318,718	638,322	2.00
Other countries	341	871	
Total in 1897	689,140	1,509,596	2.19
Total in 1896	460,946	1,029,363	2.23
Increase in 1897	228,194	480,233	

* 1 quintal=220.46 pounds.

WHEAT.

The wheat table, showing the enormous increase of 1897 over 1896 and the small percentage furnished by the United States, is of interest. While prices, on account of the peculiar condition of the market, prohibit exportation at present, attention should be given, as soon as they drop to their normal condition, to the large amount of wheat used by Switzerland. It will be seen by the table that Austria furnishes an enormous amount at prices higher than those of the United States, while Russia supplies the great bulk at a very few cents per quintal cheaper than the United States.

From—	Quantity.	Value.	Average price per quintal.
	*Quintals.**		
Germany	17,084	$57,697	$3.38
Austria	325,230	1,387,702	4.27
France	11,464	41,562	3.62
Italy	980	3,446	3.52
Netherlands	634	2,522	3.93
Russia	2,575,362	9,491,194	3.69
Danube district	740,521	2,748,480	3,71
Turkey in Europe	19,547	64,255	3,39
Turkey in Asia	599	1,849	3.09
Canada	21,557	83,966	3.94
United States	**176,568**	**685,679**	**3.88**
La Plata	6,927	23,174	3.34
Total in 1897	3,896,473	14,592,526	3.74
Total in 1896	3,583,961	11,217,632	3.13
Increase in 1897	312,512	3,374,894	

* 1 quintal=220.46 pounds.

OATS.

There should be another great field in this line. Russia gets the lion's share, at a price higher than that of the United States; and Germany, although sending only one-eleventh as much as Russia, ships seven times as much as our country, standing second and getting about the same price as our exporters Here are the comparisons:

From—	Quantity.	Value.	Average price per quintal.
	*Quintals.**		
Germany	76,156	$205,852	$2.70
Austria	7,854	22,914	2.92
France	8,979	27,573	3 07
Italy	2,142	5,686	2.66
Russia	758,943	2,239,789	2.95
Greece	2,852	6,918	2.43
Danube district	31,205	81,557	2.61
Turkey in Europe	26,011	67,309	2.59
Turkey in Asia	6,119	16,288	2.50
United States	**11,188**	**30,364**	**2.71**
La Plata	2,251	5,907	2.62
Other countries	111	308	
Total in 1897	933 811	2,710,465	2.90
Total in 1896	801,114	2,181,481	2.72
Increase in 1897	132,697	528,984	

* 1 quintal = 220.46 pounds.

FLOUR.

The attention of our Western flour producers is drawn to the following table, from which it will be seen that France heads the list at $3.79 per quintal, and, although the price paid to the United States is somewhat higher, it is not as high as that paid to Germany and Austria, the former furnishing almost thirty and the latter fifteen times as much as we do:

From—	Quantity.	Value.	Average price per quintal.
	*Quintals.**		
Germany	106,312	$500,320	$4.72
Austria	53.693	258,027	4.70
France	254,893	966,873	3.79
Italy	34,071	98,635	2.90
Netherlands	464	1,825	3.94
Russia	29,143	95,375	3.27
United States	**3,910**	**17,026**	**4.35**
Other countries	634	2,202	
Total in 1897	483,120	1,940,283	4.02
Total in 1896	377,968	1,293,597	3.42
Increase in 1897	105,152	646,686	

* 1 quintal = 220.46 pounds.

BRAN, OIL CAKES, ETC.

Special attention should be given to this line, which is generally a drug on the American market, and an outlet ought to be secured for these goods here. The price at which the United States is able to furnish is very low, yet much more is bought from other nations at higher rates. It is not because their goods are better, but because efforts have been made to place them in these markets.

From—	Quantity.	Value.	Average price per quintal.
	*Quintals.**		
Germany	36,901	$75,332	$2.04
Austria	29,224	61,644	2.17
France	147,270	412,134	2.80
Italy	84,803	192,089	2.27
Russia	19,806	40,029	2.03
United States	**10,806**	**22,300**	**2.06**
Other countries	613	1,144	....
Total in 1897	329,423	804,671	2.44
Total in 1896	227,708	556,826	2.45
Increase in 1897	101,715	247,845	....

* 1 quintal=220.46 pounds.

ADOLPH L. FRANKENTHAL,
Consul.

BERNE, *May 13, 1898.*

OPPOSITION TO AMERICAN SHOE IMPORTS IN GERMANY.

While the majority of American shoe manufacturers are in doubt as to whether the German market for their products is really worth cultivating and utilizing by well ordered and systematic enterprise, the favor with which the few American shoes hitherto imported into this country have been received is recognized as an already menacing danger to the German shoemaking industry. An indication of the kind of opposition which this new class of American imports will have to meet may be found in the following translation of an article from the Leipsic Tageblatt of May 26:

> The Prussian Minister of Commerce and Industry has addressed to the central committee of the Union of German Shoemakers' Guilds a summons to a systematic resistance to American competition in shoe products. It is known, and the fact is here emphasized by the minister, that recently American shoes of the so-called job lot or inferior grades, "Schleudersorten"—which are quite inferior to the solid German-made shoes, but which possess a certain attractive elegance of form and finish—have been imported with growing success into Germany.

> In order to effectually oppose this import, the minister recommends to manufacturers, shoemakers' unions, and shareholders interested in the shoe industry to obtain samples of such goods, and by cutting and separating the soles and uppers, which are made of paper and joined by long stitches of thread, expose and show the base quality of workmanship, and to bring these facts to the notice of the press and the knowledge of their customers. The minister finally urges upon the central commission of the German Shoemakers' Guilds the duty of assisting this movement through their different individual societies. If these means are skillfully employed, it is beyond question that the competition of American shoes in the German market can be successfully resisted.
>
> Once before, America—if not in leather goods, at least in leather—overwhelmed the German market; this was during the seventies, when hemlock leather was imported. The German tariff then put an end to this competition. To-day, in spite of the extensive German sole-leather manufacture, there comes into our markets from South America the so-called "Valdivia leather" in such quantities that our imports of sole leather exceed our exports. These conditions suggest the question whether some new tariff legislation is not necessary to protect the German market from being swamped by these importations.

This frank declaration of policy contains a warning suggestion which American shoe exporters should not fail to recognize and consider in all future dealings with Europe, and especially with Germany. They should understand that, as was the case at the opening of the American bicycle trade in this country, no effort will be spared to depreciate and point out every defect in their products. Every pair of shoddy, paper-filled, or dishonestly made shoes shipped to this country is liable to be detected, dissected, and its parts displayed in show windows, exhibited to customers, described in newspapers, and used as a means of proving the worthlessness of American factory-made foot wear.

It follows that in respect to shoes, as well as meats, fruits, machinery—in short everything in which purity, workmanship, or quality of material is essential—only absolutely genuine and superior goods should be exported to Germany. If shoddy, spurious, or inferior merchandise has any useful function at home, it should be sedulously kept there, or we shall see repeated again and again the experience of the past year, in which bankrupt stocks of cheaply made, trashy bicycles, dumped into the German market, have seriously compromised the reputation that had been established for American wheels by those of the better grades.

In all this, however, there need be nothing to discourage the development of a legitimate shoe export trade with this country; but it must be done by straightforward, intelligent enterprise, based upon commercial methods so long established and universally recognized that they have all the force of law. The American shoes thus far imported into Germany have been most favorably received, and have done much to mold and improve popular taste in that important article of apparel. The Frankfort Intelligenz-Blatt, of May 28, says, in the course of an article on the present fashion in boots and shoes:

> While it was formerly the aim of our ladies to give their feet, by means of their shoes, a small, delicate appearance, like those of a French woman, which effort often led to the choice of shoes too small and narrow, with all their disagreeable and injurious effects, the present mode is governed by another idea, since it has exalted as ideal the slender, shapely foot of the American woman. In order to produce this effect, the shoes of to-day are made quite long and of slender form. Such a shoe gives to the foot an elegant shape, to which can not be denied a graceful beauty.

The show windows of any German shoe store will prove that in the qualities which now constitute the standard of taste here, the best American factory-made shoes are superior to those produced in any other country. It is only necessary that the materials and workmanship of such exports shall be honest and genuine, and that the business of exporting and selling them shall be organized and pushed with the splendid energy and intelligence that are evinced by the Germans themselves, in their conquest of foreign markets for the surplus products of their varied and growing industries.

FRANK H. MASON,
Consul-General.

FRANKFORT, *May 31, 1898.*

NEED OF STEAMSHIP COMMUNICATION WITH LA ROCHELLE.

I have the honor to make the following report upon the commercial possibilities of the port La Pallice-Rochelle in its relations with the United States.

For the last four or five years there has been more or less speculation as to the establishment of a steamship line between La Rochelle and New York. I learn that recently both German and English steamship companies have been considering the project, but I have also the assurance that an American line would be far more acceptable to the interested parties on this side of the Atlantic.

The first question is naturally, Would such a line pay? Perhaps not for the first few months; but if the service has some organization at the start, it could be made to pay in all probability almost from the beginning. However, I will state what facts are at hand, and men of experience in steamship affairs may be able to form some judgment in the matter.

Let us consider whence would come the cargo going to the United States:

(1) From Cognac. La Pallice-Rochelle is the natural port for this place. The shipments of brandy from this great distilling center to the United States amount in value to about $550,000 annually. Not $10,000 worth would go to any other port than New York in the event of direct communication. The shipments to Boston, Philadelphia, and Baltimore would be forwarded by rail from New York, instead of being shipped from La Rochelle to Liverpool, as is now the case. During the three months ended March 31, 1898, the following were shipped to northern ports easily reached by New York: Three small casks, 117 quarter casks, 621 octaves, and 6,729 cases of brandy. This may be considered an average export.

(2) From Angoulême. The exports from this city are principally manufactures of brass goods, netting, "twilled brass cloth," etc., and fine French note paper, for which this place is famous.

(3) From Angers. Here great quantities of cables and cordage of every description are made and exported. Also, there are ten or eleven immense nurseries, whose business with the United States is considerable.

(4) From Bordeaux. I am told by two prominent business men of La Rochelle, who are in a position to speak with authority, that exports from Bordeaux are being sent from La Rochelle in constantly increasing quantities, as Bordeaux can not be reached by large ocean steamers, owing to the shallow waters of the Gironde. As is well known, immense quantities of Bordeaux wines, especially from the Medoc vineyards, are shipped to the United States.

(5) From Nantes and Saumur. The first-named city is famous for its fancy biscuits and French preserves. Saumur ships immense quantities of wine to South American ports and would doubtless help to make cargoes for United States ports.

(6) From ports on the Bay of Biscay. Much cargo is gathered at present by small coast vessels and carried to Liverpool, Plymouth, Southampton, Cherbourg, Bologne sur Mer, Havre, Antwerp, and even to Dutch ports, for transfer to steamships sailing to the United States. This could be much more easily brought to La Pallice-Rochelle in the event of direct service to New York.

The State railway has a perfect system of tracks at the docks. Mr. P. W. Morch, fils, president of the chamber of commerce at La Rochelle, says, in a recent letter concerning the subject under discussion:

> At whatsoever moment such a project becomes a reality, it is certain that the State railways which enter our port would be ready to grant every facility for the establishment of special trains for passengers and reduced rates for carrying exportations or importations of merchandise.

One can then reasonably expect to secure the carrying of the great quantities of porcelain from Limoges; a large part, if not all, of the exports from Lyons; besides much from southern Germany and from Switzerland.

The next question is, What cargo could be brought from the United States?

(1) Grain. La Pallice is fast becoming a grain depot for southwestern and central France. As the success of this venture seems unquestioned, and as America supplies the greater part of the wheat imported, the matter of grain for cargo should receive favorable consideration.

(2) Cotton. From a letter from Mr. Oscar Dahl, of the firm of M. Chevalier, ship brokers at La Rochelle, I quote as follows:

> Special arrangements have been made to facilitate the imports of cotton from the United States. This is a very important item, as large quantities are liable to be imported if, as I hope, we succeed in getting a direct line with the United States, as the rates from La Pallice to the interior compare favorably with those from northern ports.

(3) Wood pulp. There are several paper factories in this part of France, as well as at Angoulême.

(4) Lumber. American pine is used extensively for building purposes, especially Georgia pine for floors. White pine properly dressed and sawed into requisite lengths for making brandy cases and marked "sides," "tops," "ends," etc., so as to be readily assembled, would become a large item of importation. American oak and pine is also used in the manufacture of furniture, while oak for wine and brandy casks would be purchased in America in increased quantities.

(5) Miscellaneous. Imports of agricultural machinery, bicycles, lubricating and other oils, railroad steel and iron from the United States could come direct, instead of by Liverpool, as is the case now.

I again quote from the letter of Mr. Morch:

> At present, connections with America are all, or nearly all, made by the Channel ports. But it is very evident that all the passengers and all the merchandise do not come from the region comprised between the north (boundary line) of France and an imaginary line passing through the cities of Cherbourg, Alençon, Orléans, Troyes, Chaumont, and Epinal. It is certain that there are passengers and merchandise for New York in the center of France, in all the eastern region, in the west and south, and that these passengers and this merchandise, now forced to go to the Channel ports, would gladly avail themselves of a service which sailed from a more convenient point. A line sailing from here could count also upon a part of the passengers from Paris if its ships sailed Wednesday or Thursday, for, from Havre, for instance, one can sail only Saturday; passengers in a hurry, then, would come here. Finally, if the line sailed under the American flag, do you not believe that a goodly number of your compatriots visiting Paris would prefer to sail in a ship of their own nationality rather than take a foreign vessel?

I have been assured that special trains would be run to and from Paris on the arrival and departure of steamers. These trains are run now to connect with the ships of the Pacific Steam Navigation Company. At present travelers from America going to Bordeaux, Biarritz, Bayonne, Lourdes, Poitiers, Tours, Nantes, and the French coasts of the Mediterranean, the Pyrenees, and all points in eastern Spain, must first make a long journey to Paris and from there to their destination. A direct line to La Pallice would save from one-half to two-thirds of this railroad journey.

A glance at the map shows La Rochelle to be an excellent distributing center for both passengers and cargo.

While it may not be apropos, I will mention here that there is also an opening for American "tramp" steamers. The petroleum refinery located at La Pallice means large importations of crude oil. There are also two large "acid factories" using considerable quantities of Florida phosphate. Why should not American steamers carry these products? The transfer of this consulate to La Rochelle will facilitate this trade.

As an instance of the growing importance of this port, I will mention that during the month of April 907 ships visited La Rochelle, an increase of 117 over April of 1897; and during the first four months of this year 3,439 vessels entered, an increase of 371 over the same period last year.

The following information as to port facilities is from official sources:

The new deep-water port of Pallice-Rochelle (Charente-Inférieure) is situated at about 3 miles from the town of La Rochelle and is sheltered from the open sea by three large, natural breakwaters. The Pallice roadstead, well known by every seaman, offers an excellent anchorage and is reputed for its safety. The port is accessible in any weather.

It was created in order to supply the French coast between Brest and Bayonne with a harbor which the largest ships might always enter.

It is distant from Paris 293 miles; Nantes, 117 miles; Angoulême, 99 miles; Poitiers, 95 miles; Bordeaux, 129 miles; Lyons, 373 miles.

The chief ports of the New World are nearer Pallice-Rochelle than almost any other French harbor. No dangers are to be apprehended from surf, quicksands, shallows, and fogs, which render the entrance of many ports difficult and at times impassable. The entrance is marked by two fixed dioptrical lights—red on the north, green on the south. At neap tides a vessel drawing 23 feet may enter the dock at almost any time; at spring tides she may enter it during about eight hours.

The dock includes two rectangles, one of which is 437 yards long and 219 yards wide, where the largest ships may move freely; and the other 326 yards long and 131 yards wide. The quays are serviceable to the extent of about 1,750 yards. The railway accommodations, as well as the facilities for storing and transferring goods, are ample. The quays, lock, and piers are lighted by electricity.

Vessels drawing above 23 feet and arriving at low water find a very safe anchorage with 33 feet of water at least in the roadstead of La Pallice, within a few hundred yards from the outer port, and have but a short time to wait there before being admitted.

The port works comprise an outer port of 31 acres, 16 feet 5 inches deeper than the lowest equinoxial tides (O of marine charts); a dock of 28 acres at 13 feet 4 inches, with a lock 73 feet wide and 466 feet long (the ground is reserved for another lock 46 feet wide and 476 feet long); two dry docks, one of which is 590 feet 6 inches long and 72 feet wide at its entrance, with stocks for a length of 553 feet, and water depth over the stocks from 26 feet 5 inches to 31 feet 4 inches, according to tides; the other dry dock is 364 feet long and 46 feet wide at its entrance, with stocks on a length of 328 feet and water depth over the stocks from 23 to 28 feet. Each dry dock is provided at its further end with a rudder pit, and in case of small craft being admitted, in order to lessen the work of pumping the water out, the dock may be divided into two unequal parts by means of a floating gate. The larger dry dock, which contains no less than 1,589,246 cubic feet, is emptied within a maximum of five hours. The depth of water in the dock varies from 28 to 32 feet.

The outer port is bound by two piers on the north and south, its entrance being open to the west northwest by a pass 295 feet wide.

The communication between the outer port and the dock is afforded by a lock 72 feet 2 inches wide.

As the port is close to the open sea, the pilotage rates are very moderate. They vary from 17 francs ($3.28) per 100 tons to 81 francs ($15.63) per 1,000 tons for steamers; sailing vessels being charged double, except when in ballast.

GEORGE H. JACKSON,
Consul.

COGNAC, *May 17, 1898.*

THE PORT OF LIVERPOOL.

Parliament has just passed two acts giving the necessary authority to the Mersey Docks and Harbor Board to make the proposed improvements and extensions in the Liverpool dock system, upon which a report has already been sent to the Department.*

The total amount authorized by Parliament to be spent on these improvements is larger than the sum originally estimated. The exact total provided for in the two acts is $24,115,320. Of this amount $6,804,000 is supplementary to the sum of $7,776,000 authorized by a special act of 1891 to be expended for extending, deepening, and otherwise improving the docks. These improvements are nearing completion. Under the act of 1891, and the two acts just passed, there have been authorizations for the enormous expenditure of $31,891,320 for the improvement of the Liverpool docks. Even this amount does not give the grand total. The acts of 1891 and 1898 are for special and extraordinary improvements; and, in addition, there are the ordinary improvements made from time to time and paid for out of the current revenue of the board.

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* See CONSULAR REPORTS No. 208 (January, 1898), p. 45.

The last of the sailing pilot boats has just been withdrawn from active service, and now the Liverpool pilot boats are all steam vessels. Formerly there were six sailing pilot boats, but now four steamboats perform the service. The total cost was $158,679. There are 212 pilots at present in active service, and of this number 44 are attached to certain large steamship companies and are called special pilots. In addition to the four regular steam pilot boats there is a steam launch for river work, and one of the sailing pilot boats has been retained as a reserve boat in case of accident to one of the steamboats. These steam pilot boats are very swift and strong. Two of them have a tonnage of 274 tons and two of 275 tons. All of them have a draft of 10 feet. They have been specially built to enable them to stand any sea.

JAMES BOYLE,
Consul.

LIVERPOOL, *May 24, 1898.*

CARDIFF IMPORT TRADE.

With the exception of grain, slate, and petroleum, the imports from the United States to the port of Cardiff have been practically nil, in spite of repeated efforts to establish a provision and cattle trade. The recent report submitted by Dr. Wray to the United States Agricultural Department has afforded great encouragement to the Cardiff Live Stock Company, recently formed for the purpose of securing a regular line of steamers between American ports and Cardiff, and thus creating an outlet for the agricultural produce and live cattle of the South and Southwest of the United States. In previous reports I have endeavored to point out the advantages offered by Cardiff for a trans-Atlantic trade which would prove beneficial to the Southern States; this opinion has been amply confirmed by Dr. Wray, who, in the course of his report, says:

> The docks are furnished with all modern improvements and appliances for the loading and unloading of the largest steamers afloat, with ample railroad access to all parts of England, Scotland, and Wales.

With twenty-four hours advantage over Liverpool, a railroad service of only four hours to London, and the best facilities in the world for coaling, he thinks that time and money could be saved by any line that would inaugurate a weekly service for passengers and cargo from the United States to Cardiff.

The Cardiff Live Stock Company has made a start, and it is thought that its most sanguine hopes will be realized. Its first cargo has just arrived in port per the steamship *Maryland*, of the Atlantic Transport Line, comprising live cattle, grain, and general provisions for distribution throughout the country. It is recognized on every hand that the real cause of the failure of previous experiments has been due, not to the want of demand, but to the fact that buyers could not rely upon the regular arrival of shipments. There can be little doubt that the import provision trade at Cardiff could, with proper management, be made a great success. It is to be hoped that every encouragement will be afforded the promoters of this new line, so that such success will be assured.

DANIEL T. PHILLIPS,
Consul.

CARDIFF, *May 21, 1898.*

MALARIAL DISEASE IN TROPICAL COUNTRIES.

On the 10th of the present month Prof. Dr. Robert Koch, the eminent bacteriologist, delivered at Berlin before a large audience, which included many eminent persons specially interested in the colonial policy of Germany, an important and highly interesting address, embodying the results of his study of malarial diseases in tropical latitudes. The following synopsis of his theory and conclusions is translated from a published report, as of presumable interest at this time:

EXTRACTS FROM A REPORT IN THE FRANKFURTER ZEITUNG.

Malaria, said the eminent scientist, is the most formidable enemy which we have to encounter, the most serious obstacle to the settlement and development of our colonial possessions in the Tropics. We shall never enjoy the possession of our colonies until we have vanquished this disease. The first step toward successful resistance is a thorough, accurate knowledge of its origin and the methods of its dissemination.

Malaria is distributed all over the globe. In its milder forms it is found in this country in the form of swamp fever. It appears in a still more severe type in Mediterranean countries, but worst of all in the Tropics. Its most violent and malignant form is the black-water fever (vomito). The exciting cause or germ of malaria in all its forms is unquestionably a parasite in the human blood, which was first discovered and demonstrated by Italian scientists, and the functions of which are now definitely known. It appears as one of the easily recognized rings in the red corpuscles of the blood, which enlarges, splits into fragments, and within a few hours produces more than twenty young parasites, which are distributed among the corpuscles and thus disseminate and extend the infection throughout the blood.

Professor Koch has succeeded in proving that malaria, in its different stages of development, which are characterized by an intermittently rising and subsiding fever, corresponds exactly with the development of the parasites; so that by examination of the blood the progress and stage of the disease can be definitely ascertained. He has further succeeded in demonstrating the exact moment for the effective administration of quinine, which does not kill the microbe, but definitely checks and limits its power of reproduction. This discovery was highly important, for as a result of it the physician can, with reasonable certainty, provide that the disease shall be cured and not run to a fatal result. Of course, the convalesence may be long and uncertain, for relapses which leave the patient weaker and weaker are liable to occur so long as there remain parasites in the blood. Against them no sanitarium, no elevated location, offers any certain remedy; but it is, on the other hand, a consolation to know that recovery after a case of malaria may be rapid, and that the disease effects the constitution less seriously than other fevers of equal temperature and duration.

Malaria is not contagious. The means of its distribution have been sought for in the air and water, but Koch believes that blood-sucking insects are largely responsible for its dissemination. Wherever mosquitoes exist malaria will prevail. Where there are no mosquitoes, cases of malarial disease occur only when the infection has been previously received in a malarial locality. The exact relation of mosquitoes to malaria still lacks, however, exact and conclusive scientific demonstration. Analogies are found where blood-sucking insects convey disease germs, as, for instance, the tsetse fly, and especially the Texas fever among cattle, where, as is well known, the disease germ is carried by a tick, or insect.

No race of men is immune from malarial disease. Negroes living on the coasts of tropical countries are practically so, but negroes of the same race from mountainous districts coming to the coast are susceptible to the fever. The former have, according to the opinion of Dr. Koch, acquired immunity through slight malarial attacks during infancy or youth. But, as there is this naturally produced immunity, it must be possible to produce an artificial one.

On this point Dr. Koch insists that in the case of malarial disease, the exciting cause of which is definitely known, the conditions are much less difficult than in the case of other diseases, the germs of which are not known, as, for instance, hydrophobia and cattle plague (rinderpest), in respect to which a certain degree of immunity has nevertheless been attained.

The first essential step in combating the disease is for the patient to leave immediately the malaria-infected district, and be protected against mosquito bites by prophylactic doses of quinine. Professor Koch believes that through his studies of malarial disease in the localities where its most intense and virulent forms prevail, the way has been opened to new lines of study, and new limits set to the dangers of the disease itself. He closed his address with these words: "To overcome this malady is equivalent to the peaceful conquest of the most beautiful portions of the globe."

FRANK H. MASON,
Consul-General.

FRANKFORT, *June 15, 1898.*

THE FREE ZONE OF MEXICO.

Consul-General Barlow sends from the City of Mexico, under date of June 6, 1898, a report on the Free Zone, furnished by the Hon. José Ives Limantour, Secretary of the Treasury,* as follows:

There is understood by the term "Free Zone," a strip of national territory, which, covering all the northern frontier of the Republic in the States of Tamaulipas, Coahuila, Chihuahua, Sonora, and the Territory of Lower California, from the Gulf of Mexico to the Pacific Ocean, extends in a latitudinal direction 20 kilometers (12.42 miles) from the frontier border towards the interior.

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*This report was prepared at the request of the United States Treasury Department, to which a copy has been sent.

It was established in the beginning from Matamoros to Monterey Laredo (to-day Laredo of Tamaulipas) by Col. Ramon Guerra, governor of the State of Tamaulipas, by means of a decree dated the 17th of March, 1858, which was sanctioned by President Juarez the 30th of July, 1861.

The tariff of the 1st of January, 1872, left it in existence, and the tariff of 1885 caused its extension to all the frontier. The general ordinance of custom-houses of 1887, as well as that of 1891, which is now in force, preserved it, although with modifications of importance, especially as regards collection of duties.

DUTIES LEVIED IN THE FREE ZONE.

The franchise granted the Free Zone consisted, in the beginning, in not levying any duty upon imported articles; afterwards, however, some small duties, purely local, were established, and the ordinance of 1887 established as a fixed basis 3 per cent on the value of the duties according to tariff—a basis which was raised to 10 per cent by the ordinance of 1891. By subsequent decrees the duties were raised 1½ per cent for the municipality and 7 per cent for stamps for internal revenue, the result of all this being that the merchandise introduced into the Free Zone from abroad now paid 18½ per cent upon the importation duties according to tariff.

For the better comprehension of this explanation, there is here given an example of the duties paid by a certain article, according to its destination, either to the interior of the country or to the Free Zone.

Let us suppose a bale of cotton weighs 100 kilograms (220.46 pounds). If destined for the interior of the country, it will pay duties as follows:

Description.	Duties.	
100 kilograms (220.46 pounds) at 7 cents (3 cents)	$7.00	*$3.10
2 per cent for harbor works	.14	.06
1½ per cent (municipal)	.10	.04
7 per cent (revenue stamps)	.49	.22
Total	7.73	3.42

If that bale is destined to the Free Zone, it must pay—

Description.	Duties.	
10 per cent on $7	$0.70	$0.30
1½ per cent on $7 (municipal)	.10	.05
7 per cent on $7 (stamps)	.49	.32
Total	1.29	.67

If this same bale, after having been imported to the Free Zone, is shipped to the interior of the country, it must pay, in addition to the above—

Description.	Duties.	
90 per cent on $7 ($3.10)	$6.30	$2.79
2 per cent for harbor works	.14	.06
Total	6.44	2.85

which is equal to the amount charged for importation of the bale directly to the interior ($7.73=$3.42).

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* The reductions in this report are made on the basis of the valuation of the Mexican dollar given April 1, 1898, by the Director of the United States Mint—*i. e.*, $1 Mexican=44.4 cents.

It must be noticed that not all the merchandise that enters through the custom-houses of the north is destined for the Free Zone, and that much that is primarily imported for consumption there is afterwards shipped to the interior.

The greater part of the merchandise that enters through Laredo, Tamaulipas, Porfirio Diaz (Eagle Pass), City of Juarez (El Paso, Tex.), and Nogales, Sonora, pays at once the entire duties and is forwarded immediately to the interior.

The custom-house of Matamoros has little importation, and those of Guerrero, Camargo, Mier, Boquillas, Lasabe, Tiguana, and La Morita have practically none.

The greater part of the goods imported by these last is consumed by the inhabitants of the towns named and their jurisdictions; and all are United States goods, such as hams, potatoes, lard, butter, beer, matches, coarse cloth material, etc.

POPULATION OF THE FREE ZONE.

The principal cities found in the Free Zone are Matamoros, Camargo, Mier, Guerrero, Laredo City, Porfirio Diaz (Piedras Negras), City of Juarez (Paso del Norte), and Nogales. The others are small towns which have little commercial importance. The total population of the Free Zone could hardly be estimated to be 80,000 or 100,000 people.

LOSSES TO MEXICAN TREASURY DUE TO THE FREE ZONE.

As the records of the frontier custom-houses of the north make no distinction in the duties, those for the Free Zone as well as those for the interior appearing in the same classification, it is impossible to know exactly what the treasury loses by the 90 per cent rebate on the duties of the merchandise destined for consumption in the Free Zone; but, admitting as an exaggerated estimate that the total consumption of the Free Zone represents in duties $400,000 ($177,600) a year, with the 10 per cent charge on this amount, the average annual loss would be $365,000 ($162,060).

COST OF GUARDING.

The institution of the Free Zone obliges the Mexican Government, in order to prevent the introduction clandestinely into the interior of merchandise proceeding therefrom, to maintain a body of fiscal guards at an annual expense of $562,525.95 ($249,762). The guards of the custom-houses must not be reckoned in this account; for these, with or without the Free Zone, are necessary to prevent the smuggling which would be carried on from the United States, and which is even now done.

In case of abolishing the Free Zone, it would not be possible to completely suppress the fiscal guards; lessened in number and with a distinct organization, they would have to be maintained, especially since in case of their abolition the entire duties would be charged (that is to say, 90 per cent more than is now levied), and this would be inducement enough to provoke attempts at smuggling.

This body of guards, fiscal as well as administrative, supplies the place of an interior custom-house (although it does not levy duties), as it reviews in certain instances the merchandise shipped through the frontier custom-houses and in a military capacity guards the roads leading to and from the frontier to prevent smuggling. It has a system of fixed sections situated at convenient locations between the Gulf of Mexico and the Pacific, and of flying detachments continually patrolling the strip of territory named. Experience has demonstrated the usefulness of the body, for instances of smuggling by wagons, carts, or animals can be said to no longer exist.

INDUSTRIES.

In the Free Zone there are no industries worth mentioning, nor is it possible to establish any, for the general ordinance of the custom-house permits the introduction to the interior of the country of industrial products manufactured in the Free Zone only on payment of the regular duties, which are equal to those levied on foreign goods of the same kind. Exportation to the United States of America would be difficult, on account of its protective tariff, and the consumption in the Free Zone would not be sufficient to sustain industrial establishments of any importance, especially as not a single railroad exists, and transportation of merchandise is carried on in certain parts over difficult roads by means of the rudimentary system of ox carts.

AMOUNT OF GOODS SHIPPED TO THE FREE ZONE AND IMPORTED FROM IT.

I will not mention the merchandise coming from the United States of America, but will only consider that from Europe, Asia, etc.

According to statistics of the frontier custom-houses, the duties on importations into the Free Zone of European merchandise, etc., during the two years of 1895–96 and 1896–97 were:

Custom-house.	Amount of duties, calculated as a whole.	
Mier		
Guerrero		
Boquillas		
Tiguana		
La Morita		
Camargo		
Laredo, Tamaulipas	$262,326	$116,473
Ciudad Juarez	100,774	44,744
Ciudad Porfirio Diaz	80,914	36,126
Nogales	83,182	36,933
Matamoros	80,643	35,805
Total in two years	607,839	269,881
Average per year	303,919	134,940

Of this amount, at least 33⅓ per cent can be calculated to have been shipped later into the interior, paying the regular duties; this would amount to $101,306.50 ($44,980), leaving as a balance consumed in the Free Zone, $202,613 ($89,960).

OPINIONS REGARDING THE FREE ZONE.

Many distinguished financiers and eminent statesmen are opposed to the Free Zone; but all recognize the fact that, on account of existing circumstances in the northern frontier, its sparse population, without resources in agriculture, industry, or mining, the privilege could not be abolished without compensation, and the problem lies in choosing some other advantage without prejudice to the rest of the country.

The attitude of merchants in the interior is, in general, hostile, because they consider it a privilege granted to only a certain portion of the country. Merchants very far removed from the frontier, as those of San Luis Potosi, Guadalajara, and Mexico, do not consider it injurious. Those who are near, as Monterey, Chihuahua, etc., do not fear its competition; but they complain of it, for the reason that they can not enjoy the liberty of distributing their goods without documents and without fiscal inspection, as in the rest of the country. In reality the jurisdiction of the fiscal guard extends to all the States of Tamaulipas, Nuevo Leon, Coahuila, Chihuahua, Sonora, and part of Lower California, and in this territory can be shipped no merchandise, according to law, unless the merchant gives legal proof that his goods have paid the just duties and asks permission for every shipment.

SMUGGLING.

Under this title there are two divisions to be made, as follows: Smuggling to the interior of the Republic and smuggling to the United States of America. The first was at one time of importance, since it was practiced on a large scale. Bands of smugglers, resorting at times to violence, conducted merchandise to the interior; but since the Republic entered the period of peace the Government has been able to take measures to end this illegal traffic. The custom-houses, which formerly scarcely produced enough to pay the employees, now render from $4,000,000 to $5,000,000 annually from import duties.

Smuggling from Mexico to the United States of America has never been practiced to any great extent. It consists in petty individual traffic. Smuggling is not only carried on in foreign goods, but also in Mexican products, such as mescal (fire water from the maguey or agave) and tobacco worked into cigarettes, which, on account of having a very high price in the United States of America, offers a great temptation to clandestine traffic. This individual smuggling will exist forever, Free Zone or no Free Zone, as experience has demonstrated that it is very difficult to extirpate it. But it is not carried on in the exaggerated scale that those opposed to the Free Zone claim, for, taking into account the amount of European importations to the Free Zone, the amount consumed in the Free Zone, and that introduced into the interior of Mexico, it is easily seen that the smuggling is relatively insignificant. On the other hand, it must be conceded that the damage is reciprocal. Being, as it is, an illegal traffic, naturally there are no statistics; but at mere sight, and taking into consideration the condition of the frontier, it is probable that smuggling on a small scale from the United States into Mexico (consisting of merchandise for consumption) may be greater than that from Mexico to the United States, which consist of goods of a certain price which only the rich can buy.

JOSÉ ROSENBERGER,
Chief Clerk, First Section,
Treasury Department (Department of Customs).

SANITARY CONGRESS AND EXHIBITION AT DUBLIN.

Consul Wilbour writes from Dublin, May 16, 1898:

The Royal Institute of Public Health of the United Kingdom will hold a congress in Dublin from August 18 to 23, 1898. A large number of delegates from municipalities, universities, and scientific, sanitary, and other associations will be present. The meetings will be held in Trinity College, Dublin.

The congress will be arranged in the following sections:

A—Preventive medicine and vital statistics.
B—Chemistry and meteorology.
C—Engineering and building construction.
D—Municipal and parliamentary.

There will be conferences of naval and army medical officers, medical officers of health, and veterinary surgeons.

The subjects proposed to be discussed will embrace the following: Housing of the working classes, disposal of refuse, water supply of urban and rural populations, pollution of rivers, treatment of sewage, certification of sanitary inspectors, registration of plumbers, acquisition of sites for infectious hospitals, ambulance system, treatment of outbreaks of infectious disease, acts governing the sale of food and drugs, elementary education and the public health, the infectious diseases (notification) act.

An exhibition of articles relating to public and domestic hygiene, sewage disposal, drainage, water supply; heating, lighting, and ventilating apparatus; electric appliances, bicycles, motor cars, ambulances, games, life and labor-saving appliances, etc., will be held in conjunction with the congress. The following from the chairman of the health exhibition committee will explain itself:

DUBLIN, *May 10, 1898.*

JOSHUA WILBOUR, Esq.,
Consul, United States of America.

DEAR SIR: Allow me to thank you on behalf of the health exhibition committee for your kind offer of personal assistance in our efforts to present to the public the latest improvements in sanitary appliances and methods. I welcome the idea which you suggest of having a representation of American progress in this department of science and manufactures, and I can promise you on the part of our committee every consideration and assistance for American exhibitors.

Yours faithfully,

WM. R. MAGUIRE,
Chairman Health Exhibition Committee.

This will be an excellent opportunity for our manufacturers of sanitary plumbing and other appliances to exhibit their productions, and also for our sanitary engineers to meet the leading men in the profession here.

Under date of June 10, Consul Wilbour incloses the regulations of the exhibition and a description of the order of arrangement of the various sections.* He says it will be seen from regulation 1 that the rent charged for space must be paid on receipt of the allotment form; and from regulation 3 that July 31 is the last day for receiving applications for space at the tariff rate. All exhibits must be received not later than August 15.

FREIGHT RATES IN AUSTRIA.

Consul Hossfeld sends from Trieste, under date of May 14, 1898, a tabular statement showing the freight rates from Trieste to the principal cities of Austria-Hungary.† The recent remarkable increase in the imports from the United States, says the consul, has made the information of general interest. The rates given cover practically all the merchandise which passes through Trieste from the United States.

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* Filed for reference in the Bureau of Foreign Commerce, Department of State.

† The above information was furnished at the request of the Exporters' Association of New York, to which Advance Sheets have been sent.

Railroad freight rates (per 100 kilograms) for the principal commodities imported from the United States into Austria-Hungary.

Articles.	From Trieste to—							
	Vienna.		Prague.		Budapest.		Graz.	
	Flors.		*Flors.*		*Flors.*		*Flors.*	
Iron and steel ware:								
Less than 5,000 kilograms*...	1.45	$0.58	2.15	$0.87	1.67	$0.67	0.99	$0.40
5,000 kilograms and over........	1.19	0.48	1.41	.57	1.44	.58	.87	.35
10,000 kilograms and over......	1.11	.44	1.41	.57	1.44	.58	.78	.31
Agricultural machinery:								
Less than 5,000 kilograms......	2.04	.82	2.99	1.22	1.67	.67	1.64	.66
5,000 kilograms and over........	1.78	.72	2.10	.86	1.44	.58	1.30	.62
10,000 kilograms and over......	1.19	.48	1.41	.57	.99	.40	.78	.31
Bicycles:								
Less than 5,000 kilograms......	3.75	1.51	2.99	1.22	3.70	1.49	3.35	1.35
5,000 kilograms and over........	1.78	.72	2.40	.92	1.49	.60	1.41	.57
10,000 kilograms and over......	.91	.36	1.88	.76	1.49	.60	1.00	.40
Paper:								
Less than 5,000 kilograms......	1.89	.76	2.99	1.22	1.67	.67	1.64	.66
5,000 kilograms and over........	1.66	.67	2.15	.87	1.44	.58	1.34	.54
10,000 kilograms and over......	1.30	.52	1.64	.66	1.44	.58	1.30	.62
Cotton:								
Less than 5,000 kilograms......	1.96	.79	2.66	1.07	1.67	.67	1.20	.48
5,000 kilograms and over........	1.75	.70	2.15	.87	1.44	.58	1.20	.48
10,000 kilograms and over......	1.28	.51	1.64	.66	1.44	.58	1.20	.48
Oil:								
Less than 5,000 kilograms......	1.96	.79	2.99	1.22	1.67	.67	1.20	.48
5,000 kilograms and over........	1.75	.70	2.15	.87	1.44	.58	1.20	.48
10,000 kilograms and over......	1.42	.57	1.64	.66	1.44	.58	1.20	.48
Raw iron:								
Less than 5,000 kilograms......	1.45	.58	2.15	.87	1.67	.67	.92	.37
5,000 kilograms and over........	1.19	.48	1.64	.66	1.44	.58	.92	.37
10,000 kilograms and over......	.84	.38	1.09	.44	.76	.30	.62	.25
Blue vitriol:								
Less than 5,000 kilograms......	2.04	.82	2.99	1.22	1.67	.67	1.68	.68
5,000 kilograms and over........	1.75	.70	1.64	.66	1.49	.60	1.30	.52
10 000 kilograms and over......	1.28	.51	1.41	.57	1.49	.60	.78	.31
Smoked and salted meats:								
Less than 5,000 kilograms......	2.04	.82	2.99	1.22	1.67	.67	1.68	.68
5,000 kilograms and over........	1.95	.78	2.40	.94	1.49	.60	1.68	.68
10,000 kilograms and over......	1.71	.69	1.88	.76	1.49	.60	1.68	.68
Lard:								
Less than 5,000 kilograms......	1.96	.79	2.99	1.22	1.67	.67	1.20	.48
5,000 kilograms and over........	1.75	.70	2.40	.97	1.49	.60	1.20	.48
10,000 kilograms and over......	1.56	.63	1.88	.76	1.49	.60	1.17	.47

* 1 kilogram = 2.2046 pounds.

Railroad freight rates (*per 100 kilograms*), *etc.*—Continued.

Articles.	From Trieste to—					
	Sinz.		Salzburg.		Vienna, if direct from America.	
	Flors.		*Flors.*		*Flors.*	
Iron and steel ware:						
Less than 5,000 kilograms*	1.63	$0.66	1.61	$0.65	....	....
5,000 kilograms and over	1.10	.44	1.09	.44	....	....
10,000 kilograms and over	1.08	.43	1.09	.44	....	....
Agricultural machinery:						
Less than 5,000 kilograms	2.51	1.01	1.61	.65	....	....
5 000 kilograms and over	1.63	.66	1.09	.44	....	....
10,000 kilograms and over	1.08	.43	1.09	.44	....	....
Bicycles:						
Less than 5,000 kilograms	5.46	2.21	5.22	2.11	....	....
5,000 kilograms and over	1.63	.66	2.14	.86	....	....
10,000 kilograms and over	1.47	.59	.82	.33	....	....
Paper.						
Less than 5,000 kilograms	2.00	.81	2.48	1.00	....	....
5,000 kilograms and over	1.63	.66	1.61	.65	....	....
10 000 kilograms and over	1.47	.59	1.61	.65	....	....
Cotton:						
Less than 5,000 kilograms	2.20	.89	2.48	1.08	1.55	$0.62
5,000 kilograms and over	1.63	.66	1.61	.65	1.46	.59
10,000 kilograms and over	1.30	.62	1.61	.65	1.28	.51
Oil.						
Less than 5,000 kilograms	2.38	.96	2.48	1.00	1.55	.62
5 000 kilograms and over	1.63	.66	1.61	.65	1.45	.58
10,000 kilograms and over	1.30	.62	1.09	.44	1.30	.52
Raw iron:						
Less than 5,000 kilograms	1.63	.66	1.61	.65	....	....
5,000 kilograms and over	1.10	.44	1.09	.44	....	....
10,000 kilograms and over	.72	.29	.82	.33	....	....
Blue vitriol:						
Less than 5,000 kilograms	2.51	1.01	2.48	1.00	1.55	.62
5,000 kilograms and over	2.51	1.01	2.14	.86	1.20	.48
10,000 kilograms and over	2.51	1.01	1.88	.76	1.20	.48
Smoked and salted meats:						
Less than 5,000 kilograms	2.51	1.01	2.48	1.00	1.55	.62
5,000 kilograms and over	2.51	1.01	2.14	.86	1.55	.62
10,000 kilograms and over	2.51	1.01	1.80	.72	1.55	.62
Lard:						
Less than 5,000 kilograms	2.49	1.00	2.48	1.00	1.55	.62
5,000 kilograms and over	2.49	1.00	2.14	86	1.55	.62
10,000 kilograms and over	2.49	1.00	1.88	.76	1.55	.62

* 1 kilogram=2.2046 pounds.

FOREIGN RESIDENTS IN JAPAN.

From information furnished me by the governor of Kanagawa Ken, I am enabled to inclose a table showing the total number and respective nationalities of foreign residents at Yokohama on December 31, 1897.

I also inclose two tables, taken from the Japan Gazette of recent date, showing, respectively, the number of foreign residents in Tokyo

December 31, 1897, and the number of foreign employees in Japan during each year from 1890 to 1895.

Foreign residents in Yokohama.

Nationality.	Number.	Nationality.	Number.
British	869	Danish	36
American	369	Spanish	22
French	187	Belgian	7
Austro-Hungarian	27	Hawaiian	13
German	198	Swedish and Norwegian	30
Italian	23	Mexican	1
Dutch	50	Brazilian	5
Russian	17	Chinese	2,743
Swiss	82	Total	4,728
Portuguese	49		

*Foreign residents in Tokyo.**

Nationality.	Males.	Females.	Total.
Chinese	50	14	64
British	149	75	224
French	64	30	94
German	61	27	88
Russian	10	4	14
Austrian	2		2
Italian	12		12
Dutch	9	9	18
Spanish	8	2	10
Portuguese	5	1	6
Danish	1		1
Belgian	3	1	4
Swiss	6		6
American	107	89	196
Mexican	3		3
Brazilian	4	3	7
Hawaiian	2	1	3
Korean	8	1	9
Total	504	257	761

* Guests at the hotels are not included in this list.

Foreign employees in Japan.

Year.	Employees.		
	Government.	Private.	Total.
1890	166	620	786
1891	138	590	728
1892	103	569	672
1893	88	533	621
1894	77	534	611
1895	71	496	567

It will be gathered from the foregoing table, adds the Gazette, that Japan has been gradually getting rid of the assistance of foreigners Throughout these years, the British have numerically predominated. Of 567 foreigners, for instance, who were in the employ of Japanese, both Government and private, 227 were British, 203 Americans, 44 French, 40 Germans, 7 Dutch, 5 Swiss, 2 Russians, and 2 Italians.

JOHN F. GOWEY,
Consul-General.

YOKOHAMA, *April 15, 1898.*

INDUSTRIES OF MONTEREY.

Monterey is the capital of the State of Nuevo Leon, and has a population of about 73,000. Because of its progress in recent years, it is called the Chicago of Mexico. It is almost surrounded by mountains rich in gold and other minerals, capital and energy only being necessary to extract them. The city is lighted by electricity and contains six banks, eight hotels, four national colleges, two American schools, numerous churches, two telegraph lines, a telephone company, two express companies, and four street-car lines, together with the following industrial establishments:

Description.	Capital.		Description.	Capital	
Bottling establishment	*$30,000	$13,320	Sash and door factory	$125,000	$55,400
Brewery	1,000,000	444,000	Smelters	5,000,000	2,220,000
Brick works	400,000	177,600	Soap factories	175,000	77,700
Carriage factory	175,000	77,700	Cotton mills	1,000,000	444,000
Dairies	100,000	44,400	Distillery	120,000	53,280
Electric-light plants	1,000,000	444,000	Hat factory	300,000	133,200
Flour mills	150,000	66,600	Starch works	90,000	39,960
Furniture factories	250,000	111,000	Mines	9,000,000	3,996,000
Lumber yards	200,000	88,800	Candle factory	50,000	22,200
Machine shops and foundries	400,000	177,600	Match factory	100,000	44,400
Nail works	125,000	55,400	Shoe blacking and polish manufactory	25,000	10,900

* According to the estimate by the Director of the United States Mint, April 1, 1898, 1 Mexican dollar=44.4 cents.

Four railway lines pass through the city.

The State of which this is the capital is one of the most important in Mexico. It is governed by Gen. Bernardo Reyes, to whom, more than to anyone else, is due the great strides Monterey has made. He is particularly friendly to Americans, and I have been the recipient of much kindness and courtesy from his hands.

The soil of the State is fertile, yielding three crops a year in certain cases. There are many manufacturing establishments in which cotton cloths, hats, furniture, shoes, etc., are made. Steam is used as a motive power, and several thousand persons are employed. There are over three thousand primary schools in the State, as well as many others of higher grades. Three newspapers are published, two daily and one weekly.

JOHN K. POLLARD,
Consul-General.

MONTEREY, *May 24, 1898.*

MARRIAGE LAW OF SIAM.

Minister Barrett transmits from Bangkok, under date of April 15, 1898, copy of a decree enacted in 1892 and recently republished, as follows:

[Translation from the Government Gazette, January 9, 1898.]

A DECREE ON THE VALID CELEBRATION OF MARRIAGES IN SIAM AND THE PROOF OF SUCH CELEBRATION BY FOREIGN RESIDENTS.

We Chulalongkorn, etc.—

Whereas it has been reported to us by our Minister for Foreign Affairs that some foreign residents are encountering difficulties for the celebration and for the legal proof of their marriage, whenever they have contracted or intend to contract it according to the law of this country, and that therefore it appears to be desirable, on behalf of such residents, to declare and to explain, by way of authoritative interpretation, what are the conditions required for the valid celebration of marriages according to Siamese law, and then to decree in what form the legal celebration of such marriages shall be proved when both parties or one of them are foreigners—do hereby declare and decree as follows:

SECTION 1. Marriage, according to Siamese law and customs, is a contract between man and wife, to which the ordinary principles which attach to other contracts are applicable, and it is consequently validly celebrated whenever it clearly results from the words exchanged or from the rites observed that both parties freely consent to take each other as man and wife, provided he or she does not labor under some particular disability.

SEC. 2. Whenever both parties or one of them are residents in Siam, their mutual and simultaneous consent to take each other as man and wife may be legally proved, either at the celebration of the marriage or at a later time, by a declaration to that effect made in the presence of at least four well-known witnesses, before the minister of the local government or his substitute if the marriage is or has been contracted in Bangkok, or before the governor of the province where the parties or one of them are living at the time being if the marriage is or has been contracted in any other part of our Kingdom.

SEC. 3. A written deed of such declaration, as mentioned in section 2, shall be drawn either in Siamese only, or, if parties so require, in Siamese and English, both versions having the same meaning and intention, in two original documents, by the official before whom it is made, mentioning the date of the marriage, the respective names, age, and place of birth of each party, in confirmation of which data all satisfactory evidence shall be produced if so requested by the said official, and each of these copies shall be signed by the said official, by both parties, by the four witnesses, as also eventually by such of the parents of one or both parties who may be present. One of these two originals shall be carefully kept and registered in the archives of the office where it has been drawn, and the other copy shall be forwarded without any delay to the Minister for Foreign Affairs, to be carefully kept and registered in the archives of his department.

SEC. 4. True certified extracts or full copies of the deed, as mentioned in section 3, shall be delivered to any person applying for it, at the cost of 4 ticals* for each extract or copy if the document is executed in Siamese only, or of 8 ticals if the document is executed in Siamese and English.

Done in Bangkok, this 9th day of January, 1892.

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* 1 tical=50 cents (about).

NOTES.

The Port of Heyst.*—The following, dated Ghent, May 3, 1898, has been received from Consul Morris:

Work on the new harbor of Heyst and the Bruges-Heyst Canal is rapidly progressing. The latest reports indicate that all the land necessary on the route of the canal has been acquired, and that the dikes are finished. The dredging is being rapidly accomplished. The machinery is at present about 8 miles from the mouth of the canal, the length of which is to be some 14 miles. The construction of the stone wall for the support of the banks is also advancing. The masonry of the swing bridge at Dudzeele is finished; the iron superstructure is being set in place. The ferry at Sisseweghe will be established and maintained at State expense.

The harbor of transient call for vessels plying between two other ports is entirely excavated; at the present moment it is used as a working yard for the cutting of the blocks of 2 to 3 tons' weight, destined for the construction of the great breakwater and the landing quays. The sea lock is well under way, the down-stream masonry will soon be finished, and the upper stream stonework will not require much longer time.

The entrance channel is under construction, work being pushed both beyond and within the sea line. The jetties will be finished about the end of 1898. The breakwater consists of three parts—the portion on the strand, the trestlework portion, and the sea jetty protecting the landing quays. The portion on the strand is almost completed, and the trestlework will soon be begun. The stone wall for the protection of the sea dike to the west of the harbor is finished for two-thirds of its length.

Belgian Export Association.—Consul Morris, of Ghent, under date of May 21, 1898, says:

I have the honor to call attention to the recent organization of a Belgian industrial federation to favor the exportation of national products. The headquarters are at Brussels. Any person engaged in industry or manufacture in Belgium may become a member. The association is subdivided into fourteen groups, according to the nature of the various manufactures. Members may be enrolled in one or more groups, but pay an additional fee for each registration.

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* See report by Consul Osborne, of Ghent, entitled "Bruges-Heyst Maritime Canal," dated June 29, 1893, and published in CONSULAR REPORTS No. 155 (August, 1893), p. 419.

The annual fee is $19.30 for individual members and $38.60 for corporations. Admission to membership implies the obligation to remain a member for the first five years and subsequently for terms of three years.

This association proposes to establish bureaus of information at home and abroad, sample museums, and general financial and commercial agencies in foreign countries.

It is believed that this effort will lead to a greatly increased export trade of Belgian products.

Exports from Geneva to United States.—Consul Ridgely writes from Geneva, June 1, 1898:

I wish to call attention to the following comparative statement of exports from the consular district of Geneva to the United States during the months of May, 1897, and May, 1898:

Articles.	May, 1897.		May, 1898.	
	Francs.		*Francs.*	
Watches and watch material	77,742.85	$15,004	52,562.13	$10,145
Music boxes	60,016.50	11,583	23,025.05	4,444
Hardware	14,600.40	2,818	13,462.40	2,598
Scientific instruments	....	....	2,470.00	477
Chemical products	3,048.90	589	1,183.75	228
Jewelry	1,250.00	241	....	....
Leather	10,498.35	2,026	....	....
Milk products	13,913.00	2,685	....	....
Wine	1,797.00	346	....	....
Gold	9,412.50	1,817	....	....
Personal effects	3,380.00	652	....	....
Total	195,659.50	37,761	92,703.33	17,892

The decrease in exports is the largest ever known in this district during a similar period, and is directly due to the war between Spain and the United States. It is needless to add that Swiss merchants who do business with the United States are extremely dissatisfied with the present situation.

Movable Bridge at Tunis.—Consul Skinner, of Marseilles, under date of June 22, 1898, says:

A bridge has just been completed at Bizerte, Tunis, under the direction of French engineers. For a long time ferry boats were utilized at the entrance of the canal between the Mediterranean and

Bizerte Lake, and the authorities hesitated to permit the construction of a swinging bridge, the manipulation of which, it was thought, would involve loss of time. The problem was solved by M. Arnodin, who invented the structure, which was turned over to the public with some ceremony on June 19.

Two steel towers have been erected on opposite sides of the canal, each 65 meters (213.22 feet) in height, and by means of an arrangement of cables and pulleys the car or bridge proper is quickly elevated to the top of these towers on the approach of a vessel, the latter easily passing under. A 6-horsepower engine elevates the car in forty seconds, and the loss of time is reduced, apparently, to a minimum. The bridge is of especial importance, as the Government is establishing a naval station at the port of Bizerte.

Aluminium for Horseshoes and Bicycles.—The commercial agent at Roubaix, Mr. Atwell, writes, under date of June 7, 1898:

Aluminium is now being used in the manufacture of bicycles, and military authorities have for some time past made an effort to employ this metal in place of iron, copper, and steel for all articles of equipment carried by infantry, in order to reduce the weight as much as possible. With the same object, the Russian Minister of War has ordered aluminium horseshoes for the cavalry. The first trial is now being made by the Finland dragoons, and the horses are shod as follows: A shoe of the new aluminium model is placed on one foot, the three remaining shoes being of the kind now in use. The trial, which has already lasted six weeks, seems to be satisfactory, as the aluminium wears out less rapidly and is less affected by mud and moisture than the ordinary shoe. The difference in weight is about 70 grams (2½ ounces) on each shoe. The cost is not greater at present, and will be less as soon as the system of manufacturing the new shoes shall have been perfected.*

Proposed Railway Concession in Nicaragua.—Consul Sorsby, of San Juan del Norte, says, under date of June 1, 1898:

I have to report the departure of Mr. Louis Wichmann, the agent of the Atlas Company and local manager of the Carribbean and Pacific Transit Company, in connection with the proposed acquisition by those companies of the national railway system of Nicaragua. The Nicaraguan Congress is now in session, and, should the Atlas Company consummate the purchase of the railway system and secure the concessionary privileges outlined in my report of May 5,* the contract will probably be ratified by Congress without delay. Such a concession as is contemplated by the Atlas Company, involving, as it does, extraordinary monopolies and privileges, must be ratified by the Nicaraguan Congress in order to be final.

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* Copy of report was sent to the War Department June 29, 1898.

Trade in the Bay Islands.—Consul Johnston writes from Utilla, June 1, 1898:

There has been a decline in prices of both bananas and plantains, and a great many of both have been left to rot on the trees. On account of the steamship *S. Otin*, of New Orleans, going ashore on the northwest corner of the Island of Ruatan, on the 23d of May, there were lost 20,000 bunches of bananas. This involved not only the loss of the fruit, but the work of cutting and hauling to the coast for shipment. The whole loss will amount to $8,000 gold. The cocoanut trade is just beginning to open, and fair prices are being realized by the producers. There are usually shipped from the Bay Islands and the coast in this vicinity more than 100,000 bunches of bananas a week, and of plantains (which are sold by the thousand, and not by the bunch) 50,000 a week. There are shipped from Bay Islands between 6,000,000 and 10,000,000 cocoanuts each year.

Notes from Paraguay.—Consul Ruffin writes from Asuncion, March 31, 1898:

The importation for last year (figures just obtainable) amounted to $2,203,359 gold. The exportation was $1,955,803; showing a difference of $247,556 in favor of the imports.

The plan to construct a telegraph to Villa Conception to connect with all the lines of the north is now being considered. The question of putting sewerage in the city and introducing running water is also discussed.

This Congress may ratify a new treaty of commerce with Brazil. I inclose copy of the President's last message to Congress.†

Depreciation of Spanish Currency in Morocco.—Consul-General Partridge, of Tangier, informs the Department under date of May 31, 1898, that the Spanish currency, which circulates largely in Morocco, has much depreciated. There is also in use, says Mr. Partridge, Moorish silver coin, called Hassanee. French and English money is also current. In January the exchange value was $1.35 Spanish for $1 American; May 1 the rate was $2 Spanish for $1 American. Owing to relief obtained by the Bank of Spain, the rate at the time of writing (May 31) was $1.60 Spanish for $1 American. The British post-office, continues the consul-general, as well as the Moorish customs authorities, refuse to accept Spanish currency. Hassanee coin formerly fluctuated with Spanish and was interchangeable at par, but is now at a premium of 10 to 20 per cent.

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* See *ante*, p. 530.

† Referred to the Bureau of the American Republics.

Textiles in Roubaix.—Commercial Agent Atwell writes from Roubaix, under date of May 5, 1898:

For the month ending April 30, the general situation of affairs at Roubaix and Tourcoing, while not as bad as during the corresponding period of last year, is far from giving satisfaction. The woolen spinning mills have been kept active, but the price of the manufactured goods is very low. Carded wools have been produced in large quantities, but with small profit. Combed wools have been active, this being the height of the season for this industry, and prices are firm. Wools have been somewhat in demand and prices firm on all grades. The cotton-spinning mills have worked full time to fill orders, but with small profit. The dyeing of yarns is normal.

Congress on Public Art in Belgium.—A note has been received from the Belgian legation, dated New York, June 13, 1898, calling attention to the first international congress on public art, which will meet at Brussels, September 24–28, 1898. Minister Lichtervelde says that he is instructed by the Belgian Minister of Foreign Affairs to invite the Government of the United States to send delegates to this congress. Copies of a circular giving information as to subjects for discussion are inclosed, and the minister notes that eminent persons have consented to act as presidents and honorary members.

According to the circular, the programme will have three divisions—public art from the standpoint of law and regulations, from the social standpoint, and from the technical standpoint. Correspondence should be addressed: Congrès international de l'Art public, Secrétariat général, Hotel Ravenstein, Brussels.

Belgian-Japanese Patent Rights.—Consul Roosevelt writes from Brussels, May 3, 1898:

The official journal, the Moniteur Belge, publishes, April 21, 1898, a notice stating that an agreement has been reached by Belgium and Japan, for the reciprocal protection of patents of invention, trade-marks, and designs. By virtue of this agreement, which was dated March 11, 1898, Belgian subjects in Japan and Japanese subjects in Belgium will reciprocally enjoy the same protection as other nations in regard to patents, trade-marks, and designs, by carrying out the conditions prescribed by the law of the respective States.

Conditions in the Yangtze Valley.—Under date of May 5, 1898, Consul Martin, of Chinkiang, reports that the Yangtze Valley, comprising the six provinces of Szechuan, Hupeh, Hunan, Kiangsi, Anhui, and Kiangsu, with a population of from 70,000,000 to 90,000,000, is in a very unsettled condition, owing to the political disturbances in China and to the new order, said to have emanated from the Imperial Government at Pekin, opening all the inland waters of the Empire to domestic and foreign steam navigation[*] and placing the likin stations (native customs) along the canals under the jurisdiction of the imperial maritime customs. These likin stations, continues the consul, have been controlled by the provincial officers, and the new order deprives the viceroys of much of their emolument, as well as thousands of local officials of daily sustenance. The result is general discontent, which in some cases has been communicated to the imperial authorities. The foreigners are believed by many to be responsible for the change, and there is much bitter feeling.

Scarcity of Cereals in China.—Consul Martin, of Chinkiang, under date of May 17, 1898, says:

I forward herewith a translated copy of a communication received from the superintendent of the customs at this port. This order means that there should be no export of cereals from Chinkiang to any other ports in China. This province is usually regarded as the garden of the Empire.

TAOTAI TO CONSUL MARTIN.

CHINKIANG, *May 14, 1898.*

SIR: I have the honor to inform you that I have received a letter of instruction from his excellency the viceroy of the Liang Kiang province, residing at Nankin, ordering me to prohibit the export of cereals from the port of Chinkiang, on account of the great scarcity of that commodity in this province.

I have, etc.,

CHANG HENG.

[†] See CONSULAR REPORTS No. 214 (July, 1898), p. 374.

Japanese Bounties on Silk Exports Abrogated.—The Department is in receipt of a note from the Japanese legation, dated May 26, 1898, in regard to the passage by the Imperial Diet of a bill repealing the law granting a bounty on the export of certain classes of raw silk.* The act, says Minister Hoshi, has received the sanction of the Emperor, and was promulgated on May 26, 1898, to take immediate effect.

Trade-Marks in Hungary (Correction).—Consul Chester writes from Budapest, under date of June 17, 1898, to correct an error that appeared in the original report on trade-marks in Hungary, printed in CONSULAR REPORTS NO. 214 (July, 1898), page 400. In the first article of the regulations relating to trade-marks, the abbreviation "kr.," referring to the price of the revenue stamps, was incorrectly expanded into "kroner." It should have read "kreutzer."

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
A. L. Frankenthal, Berne..	June 4, 1898	Tetanus antitoxin	Marine-Hospital Service.
W. H. H. Graham, Winnipeg.	June 15, 1898	Agricultural outlook	Department of Agriculture.
L. S. Hunt, Palmerston	June 14, 1898	do	Do.
W. P. Atwell, Roubaix	June 4, 1898	Crops in France	Do.
Do	June 7, 1898	Aluminum for horseshoes and bicycles.	War Department.

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*See CONSULAR REPORTS No. 202 (July, 1897), p. 424; No. 213 (June, 1898), p. 306.

FOREIGN REPORTS AND PUBLICATIONS.

Commerce of the Canary Islands.—A report in the Moniteur Officiel du Commerce, Paris, March 31, 1898, reads as follows:

The commercial movement of the Canaries has progressed in the last ten years at the rate of from 2,000,000 to 3,000,000 pesetas ($386,000 to $579,000) a year. From 18,000,000 pesetas in 1888, imports rose to 43,000,000 pesetas in 1895. In these totals, however, the importation of coal is included; without coal, the total in 1895 was 17,494,356 pesetas ($3,376,411.)

The economic development of the Canaries depends solely on the number of boats stopping at the ports, which promotes a larger importation of coal and a more extended sale of meat, poultry, vegetables, fruits, wines, etc. The exportation of early fruits and vegetables has been of importance in the last six years. Cochineal formed at one time the sole wealth of the Canaries. In 1889, its exportation amounted to 20,000,000 pesetas ($3,860,000); since that time the quantity has greatly diminished.

The early fruits and vegetables from the Canaries are sent almost entirely to London and Liverpool. Tomatoes are exported in boxes of different sizes, delivered to the exporters at from 12 to 15 pesetas ($2.32 to $2.90) the quintal of 46 kilograms (101 pounds); at London, they sell for 1s. the kilogram (24 cents per 2.2 pounds). As regards cultivation, the seeds are imported from England, sowed in the months of August and September, and transplanted a month later into well-irrigated land. About 9,300 plants can be put in a fanagada, or 1⅓ acres. The fruit is large and highly flavored, the earliest ripening at the end of October, when the export trade commences. The potato crop is ready in December or January, and a quintal (220 pounds) sells in London for 14s. to 17s. ($3.36 to $4.08). Many landowners plant a second crop, which is ready for market in March or April. From October to May one can always count on two harvests, whatever may be the product cultivated. Both potatoes and tomatoes are remunerative. The banana, however, when it is of good quality, gives the greatest profit. The ground yields eighteen months after planting; one can count on 1,000 to 1,200 plants to the acre, and on 150 bananas to the plant, with two harvests a year. The bunches are sold for 3 to 5 pesetas (58 to 97 cents). The freight on tomatoes and potatoes is 15s. ($4.60) the ton for London or Liverpool; for bananas, 1½s. to 2s. (36 to 48 cents) per bunch for London and 24 cents for Liverpool. Oranges are excellent and very abundant, but are not cultivated for export.

There are seven sugar refineries operated by steam in Grand Canary Island, one at Teneriffe, and two on the Island of Palma. Sugar cane yields most abundantly, and the industry is profitable, as the sugar enters Spain free of duty, while foreign sugars pay 40 per cent.

The vines produce well, and the wines, when made with care, rival the best known.

The Canaries are famous as a resort, from 2,000 to 3,000 visitors wintering in the islands.

The following table gives the average quantities and values of the principal exports from Grand Canary Island:

Articles.	Quantity.	Value.	
		Pesetas.	
Tomatoes .... kilograms*...	2,342,890	820,011	$158,262
Potatoes .... do......	1,546,777	234,732	45,303
Bananas .... do......	6,704,836	844,635	163,015
Cochineal .... do......	296,174	814.478	157.194
Onions .... do......	2,042,918	306,347	59,125
Tobacco .... do......	19,682	40,752	7.865
Wines and alcohols .... liters†...	1,129,568	612,365	118.186
Total........	....	3,673,320	708,950

* 1 kilogram = 2.2046 pounds.   † 1 liter = 1.0567 quarts.

The value of the exports from Teneriffe averages 9,426,425 pesetas ($1,819,299).

Development of China.—The following extract is from a speech made before the London Chamber of Commerce, as published in the London and China Telegraph, London, June 20, 1898:

In order to develop our trade, it is necessary to find what goods the Chinese want, and supply them. It is of no use for home manufacturers to send catalogues of such things as silk hats and corsets, or to send samples of their goods to consuls. The pushing of business must be done on the spot by men who have studied the commercial or middle-class Chinese. A German took the trouble to have a wooden model made in China for a lamp stand, asking the Chinese what changes they would suggest. He sent the perfected model home, and in a year cleared $10,000 on lamps. In machinery there is great room for expansion of trade. In the near future there will be a demand for enormous quantities of steel rope and mining machinery. Manufacturers should send the exact qualities of goods asked by the Chinese, and not a superior article.

The same edition of the London and China Telegraph contains a letter from the past president of the Society of Engineers, Mr. George A. Goodwin, who has just returned from a tour of twenty-one months in Japan and China, parts of which read as follows:

No country on the face of the earth offers anything approaching the opportunities that exist in China for the construction of railways, canals, waterworks, mining industries, and industrial manufactures. The opening of the country as we should do it, and ought to do it, giving all our competitors equal facilities to our own, with honest administration and the proper payment of officials, would, I am satisfied, yield large revenues to the Emperor, as well as ample funds to pay the debts and administer the laws of China. It appears as if the time has at last arrived when we may consider the active development of China to be beginning. One very important suggestion that I am most anxious should be brought before our home manufacturers, and that would lead to an important increase in our trade, is the holding of a moderate-sized permanent exhibition in Shanghai, where the Chinese could see all kinds of machinery in motion—engines and various industrial manufactures. The Chinese are essentially a people who want to "look—see" everything before they buy (so that they can thoroughly understand methods and means), and this suggested exhibition would give them this opportunity. Further, some of the small plants and machines might be taken inland to show at work on the spot, say for rice cleaning, oil extracting, etc., and thus bring western development to the very doors of the users. Of all cities in China, Shanghai would be the very best for the purpose proposed. The most enlightened natives make it their center, either resident or as a periodic visiting place to "look—see" what is going on. The Government, too, has moved the railway administration office thither, besides which it is the city that gives most facilities for getting to the interior. An alternative scheme would be to have a floating exhibition on board ship, which could go to every port.

Railways in China.—The Bulletin de la Société de Géographie Commerciale, Paris, vol. xxx, No. 12, has the following report:

Since the 1st of October, 1897, two trains a day run between Pekin and Tientsin, at the rate of 32 kilometers (19.8 miles) an hour. It is a journey of nearly four hours. There is also a line from Tientsin and Tang-Kou, extending nearly 40 miles beyond the place on the coast where the Great Wall reaches the sea. This railroad, which was built to communicate with the coal mines of Kaïping and was prolonged to Tientsin, terminates at Li-Hong-Tchang. There are four daily trains in both directions between Tientsin and Tang-Kou, and two from Tang-Kou to Shan-Haï-Kwan. The line between Pekin and Tientsin was constructed by English and American engineers. The tariff for travelers is about 5 cents (Mexican*) per kilometer (0.62137 mile) in the first class and 2½ cents in the second. The first-class carriages have cane seats, and the luggage is carried with the traveler. Besides this line, there is one other in China, 18 kilometers (10.5 miles) long, between Shanghai and Woosung, constructed by Europeans. Lines are projected from Pekin to Hankau upon the Yangtze Kiang, from Pekin to Taï-Hwen in Shansi, and from Shanghai to Nankin.

Railway in the Philippines.—The London and China Telegraph, London, June 20, 1898, publishes an account of a recent meeting in that city of bondholders of the Manila Railway Company. According to the report presented, the total receipts of the company for 1897 were $733,000 Mexican ($357,484 in United States currency), or an increase of nearly 20 per cent over 1896. The increase had been gained at an additional expenditure of $21,000 ($10,242), or rather under 7 per cent. The report called attention to the fact that during the period under consideration coal had gone up in price and sleepers were dearer, on account of the fall in exchange. The goods traffic had increased, while the passenger traffic was declining. The greatest number of passengers (800,000) had been carried in 1894; but the number had subsequently decreased, on account of a tax of 10 per cent placed by the Spanish Government on the passenger traffic. The goods carried had increased from 159,000 tons to 214,000 tons, the bulk being from the country to Manila. The cost of working the railway was 47.7 per cent of the gross receipts; but this, continued the report, was not altogether a fair test, because a great deal depended upon the tariff. The latter was very low, as shown by comparison with the tariffs of railways built under similar circumstances. The Puerto Rico Railway, for instance, got for its third-class traffic 10 cents (4.8 cents) per ton per kilometer (0.62137 mile); certain railways in Cuba obtained 4 cents (1.7 cents) per ton per kilometer; while the Manila Railway obtained barely 2 cents (.08 cent) per ton. To put this in another way, the rate of a ton of goods over the whole length of their line of 196 kilometers (121.7 miles) would be $3.50 ($1.71); at the Cuban rate they could earn $7.75 ($3.78), and at the Puerto Rican rate almost $20 ($9.75). In spite of the disturbances during the year, there was an increase of 25 per cent in traffic, until the road ceased working. The condition of the line was considered satisfactory.

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* According to the Director of the United States Mint, the value of the Mexican dollar on April 1, 1898, was 44.4 cents in United States currency.

Agricultural Machinery in Southern Russia.—According to a British Foreign Office report (annual series 2076), sales of English machinery amounted to 35 portable engines and steam thrashers, valued at £18,617 ($90,599), in 1897, against 50, with a value of £26,596 ($129,429), in 1896. United States machinery was sold as follows: Reapers, 300, valued at £7,181 ($34,946); binders, 30, worth £957 ($4,657); mowers, 200, valued at £3,191 ($15,529); hayrakes, 300, at a value of £2,074 ($10,093). In the preceding year there were sold 600 reapers, 50 binders, 200 mowers, and 300 hayrakes, of a total value of £24,415 ($118,816). There was a decrease in value during 1897, on account of the large stock of machinery on hand. Three hundred plows, mostly of German make, representing £1,117 ($5,436), were sold during the year; and 40 horse-gear thrashers, valued at £2,340 ($11,388).

Velocipedes in Russia.—The Moniteur Officiel du Commerce, Paris, March 17, 1898, has the following:

> The customs department has made a special classification for velocipedes, from which it is seen that the importation amounted to 10,909 pieces, valued at 1,248,000 rubles ($492,336), in 1896. The bulk of the importation took place in the months of March and April. The sales increase every year. The preferred makes are American and German.

Russian Bureau of Commercial Information.—According to the Moniteur Officiel du Commerce, Paris, March 17, 1898, a bureau has recently been opened in St. Petersburg to furnish information on all commercial questions, and also as to the credit of merchants. The bureau is under Government management, and appears to have for object to encourage foreigners to develop commerce with Russia. Through this medium importers, exporters, and manufacturers can easily inform themselves in regard to the financial standing of any business firm.

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